

# Instructor's Manual

## Management Control Systems Performance Measurement, Evaluation, and Incentives

Fourth edition

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Wim A. Van der Stede

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ISBN: 978-1-292-11056-1

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Second edition published 2007  
Third edition published 2012  
**This edition published 2018**

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ISBN 978-1-292-11056-1

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§ *New case* in this 4th edition of the text.

\* *Updated case* from the 3rd edition of the text.

All other cases as in the 3rd edition.

#### **Overview of changes in cases from the 3rd to the 4th edition:**

##### **Cases removed from 3e: 20**

1. *Armco, Inc.: Midwestern Steel Division*
2. *Loctite Company De Mexico, S.A. de C. V.*
3. *Lincoln Electric Co.*
4. *AirTex Aviation*
5. *Toyota Motor Sales*
6. *Citibank Indonesia*
7. *HCC Industries*
8. *Patagonia, Inc.*
9. *Tsinghua Tongfang*
10. *First Commonwealth Financial Corporation*
11. *Southern California Edison*
12. *Formosa Plastics Group, Inc.*
13. *Financial Reporting Problems at Molex, Inc.*
14. *Landale PLC*
15. *ConAgra Grocery Products Company*
16. *Lincoln Electric: Venturing Abroad*
17. *TECO Electric & Machinery Co. Ltd.*
18. *City of Yorba Linda, California*
19. *Waikerie Co-Operative Producers Ltd.*
20. *Boston Lyric Opera*

Note: ***These cases are still available for use. Please contact the authors and/or publisher for access to the case text and teaching notes.***

**New cases introduced in 4e: 23** [indicated with § in the Table of Contents above]

1. *Office Solutions, Inc.*
2. *Witsky and Associates, Inc.*
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4. *Better Beauty, Inc.*
5. *Atlantis Chemical Industries*
6. *Wessanen NV*
7. *The Stimson Company*
8. *Multiple Versions of the Plan*
9. *Vitesse Semiconductor Corporation*
10. *Corbridge Industries, Inc.*
11. *King Engineering Group, Inc.*
12. *Dortmunder-Koppel GmbH*
13. *Johansen's: The New Scorecard System*
14. *Mainfreight*
15. *Howard Building Corporation, Inc.*
16. *Fine Harvest Restaurant Group (A) and (B)*
17. *Arrow Motorcar Corporation*
18. *Bio/Precise Medical Devices, Inc.*
19. *Andrew G. Scavell, Chief Risk Officer*
20. *Wired PLC*
21. *Mean Screens USA, Inc.*
22. *Ethics@Cisco*
23. *SCI Ontario: Achieving, Measuring, and Communicating Strategic Success*

**Cases updated from 3e: 10** [indicated with \* in the Table of Contents above]

1. *Axeon N.V.*
2. *Zumwald AG*
3. *Behavioral Implications of Airline Depreciation Accounting Policy Choices*
4. *Las Ferreterías de México, S.A. de C.V.*
5. *Industrial Electronics*
6. *Haengbok Bancorp*
7. *Olympic Car Wash*
8. *Hoffman Discount Drugs, Inc.*
9. *Desktop Solutions, Inc. (A) and (B)*
10. *Conservative Accounting in the General Products Division*

# Introduction

One constant in the teaching of virtually all courses in management control systems (MCSs) is their heavy use of the case method of instruction. Even instructors who are most comfortable lecturing and/or who like to describe the management control issues through relatively formal (e.g., agency theory) models find it useful to use cases to illustrate the lecture points or the key parameters in the models. This textbook is set up to facilitate the teaching of MCS cases. In addition to the text material, the book includes 70 cases of great variety. Thus, it can be used in courses in which instructors use a case in virtually every class, or it can be used in courses in which only a few cases are used. The model syllabi in the following sections of this manual show this variation: there are syllabi for courses where there is a case in every session, and there are syllabi for courses that use a mixed approach where lectures (without cases) are followed by a session dedicated to the analysis of a case pertaining to the foregoing lecture.

Our own teaching style involves the use of many cases, with considerable student participation in the discussions. This type of course makes some students, particularly those who have not experienced a case course before, possibly uncomfortable, at least initially. We thus sometimes find it necessary to “sell” the advantages of the case method. To this end, instructors can use the note called “**The Case Method of Instruction: Suggestions for Students,**” which can be handed out either in or before the first day of class. This note is included in this manual for your consideration and possible use.

As for course organization, there is no single one-size-fits-all or “template” approach. Management control is a complex, multi-dimensional subject, and courses in MCSs can be organized in many ways. The outline of the textbook provides one way that we have found useful for organizing the materials. The model syllabi included in the following sections of this manual show some variation, which we have ourselves implemented and tweaked over the years depending on level, length, and purpose of the given course, among other considerations (e.g., whether or not there are visitors for some sessions or part of the course).

Even with the same outline, instructors can choose to use quite different sets of cases and different case orderings. This is because, unlike simple problems, most of the cases included in the book describe rich real-world examples, and real-world examples usually do not illustrate just one point.

Consider, for example, the Statoil case, which is included in Chapter 11 (Remedies to the Myopia Problem) because Statoil uses a key-performance-indicator (KPI) structure that is Balanced Scorecard-like to deal with some issues associated with more traditional approaches to performance measurement, as discussed in Chapter 10 (Financial Performance Measures and their Effects). But the case can also be used effectively with Chapter 8 (Planning and Budgeting) because Statoil separates the functions of target setting, forecasting and resource allocation using the principles of “Beyond Budgeting.” Statoil also relies quite substantially on subjective performance evaluations in determining incentives as discussed in Chapter 9 (Incentive Systems). Finally, students have to consider the industry characteristics, the organization structure, the characteristics of the personnel in key positions, and the company’s history (e.g., a recent merger), none of which are dealt with in any specific chapter but which are important to understand when evaluating the effectiveness of a MCS. All told, the case can be used to focus on any of these issues, but also as a powerful integrative case cutting across several topics related to the design and operation of a management control system. If the



instructor is looking to illustrate “Beyond Budgeting” in a more focused manner, then using the new Mainfreight case is probably a good choice. The Mainfreight case could have been slotted in Chapter 8 (Planning and Budgeting), but we slotted it in Chapter 11 (Remedies to the Myopia Problem) because the company is keen to try and mitigate the alleged dysfunctional consequences of presumably rigid and possibly myopic traditional budget and target setting processes.

To give another example, the Catalytic Solutions, Inc. case, which is included in Chapter 11 (Combinations of Measures and other Remedies to the Myopia Problem) to illustrate the use of nonfinancial performance measures, also can be effectively used with Chapter 2 (Results Controls), Chapter 6 (Designing and Evaluating MCSs), and Chapter 9 (Incentive Compensation Systems). It deals with designing and evaluating a new, first-time incentive system (Chapter 6) to motivate employees toward generating desired organizational outcomes (Chapter 2) that are primarily nonfinancial and long-term in nature (Chapter 11).

For a final example, consider the new case Andrew G. Scavell, Chief Risk Officer. We placed it in Chapter 14 because we also have the Don Russell, CFO case there. Both cases give students an insight into these important controller and risk management roles at the C-suite level. However, the Andrew Scavell case can also be taught pertinently with Chapter 13 focused on corporate governance and related board responsibilities and concerns, of which enterprise risk management (ERM) certainly is one. In Chapter 13, the Andrew Scavell case goes nicely together with the Entropic Communications, Inc. case. Indeed, instructors who wish to spend a bit more time on risk management could easily teach both the Entropic and Andrew Scavell cases, in this order in two consecutive sessions, (which would allow assigning Chapters 13 and 14, respectively, as the key reading for each of the consecutive sessions accordingly). The Andrew Scavell case also discusses the implementation process of the “new” ERM system, which dovetails with the coverage in Chapter 6—designing and evaluating MCSs. Finally, given the intricate connection of ERM in this case company with the planning and budgeting systems, the case also could be taught in connection with Chapter 8.

Because we can slot each case in only one chapter, and to help instructors with their case choice decisions, we included in this manual a so-called “**Case Matrix**” showing the multiple links between cases and chapters.

The following pages also show several course organizations we use in various teaching programs. The first syllabus (**Model Syllabus 1**) is for an undergraduate half-semester course taught in a two-classes-per-week format over 7 weeks. The second syllabus (**Model Syllabus 2**) shows the contents of a 5-week module focused on management control as part of a 4-module senior undergraduate management accounting course taught in a two-classes-per-week format (through a combination of weekly lectures and seminars). The third syllabus (**Model Syllabus 3**) is for a 15-week semester-long elective course in the MBA program, thus providing 30 sessions (2 class meetings per week) of materials in this topic area. The fourth syllabus (**Model Syllabus 4**) shows a 10-week term format to offer these materials to MSc students, again through two meetings per week. For this course, the first session of the week is usually lecture-like, whereas the second one is focused on a case analysis related to that week’s topic. The final syllabus (**Model Syllabus 5**) is essentially Model Syllabus 3 but offered as a single 3-hour class meeting per week. A format with one long class each week makes it difficult, but not impossible, to use two cases each week. Instead of using two cases, instructors may choose to use lectures, in-class exercises, video clips, etc., to break up the format.

You will also see that we used some cases “out of order,” that is, in conjunction with a chapter reading different from the chapter in which the case is included in the book. That is why

we emphasize that both the inclusion of the cases in the chapters and these guides are merely illustrative. We encourage instructors to adapt the materials to their own organization and teaching emphasis. In so doing, we hope that the alternatives illustrated in the case matrix will prove helpful.

Finally, some teaching materials have been made available electronically on the publisher's website ([www.pearsoned.co.uk/merchant](http://www.pearsoned.co.uk/merchant)). These include, particularly, instructional PowerPoints for each chapter of the book developed by the second author of this book, as well as databases and Excel spreadsheets for the Vitesse Semiconductor Corporation case; the VisuSon, Inc. case; the Bank of the Desert (A) and (B) cases; and the Fine Harvest Restaurant Group (A) and (B) cases.

The Table of Contents also shows which cases have been removed from the prior edition, which ones are new to this edition, and which have been updated. Instructors wishing to continue to use some of the cases that we may have removed, please contact the authors and/or publisher for access to these cases and teaching notes. Please also contact us with any other suggestions or comments. We can be reached at:

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# Model Syllabus 1

## Accounting 476—Performance Measurement Issues

Leventhal School of Accounting, University of Southern California

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<b>Class Hours</b>	Tue/Thu 2:00–3:50 p.m.
<b>Classroom</b>	ACC 310
<b>Office Hours</b>	By appointment. Arrange by e-mail. I will do my best to accommodate your schedule.
<b>Prerequisites</b>	ACCT 372
<b>Honor Code</b>	The Leventhal School Student Honor Code took effect on September 1, 1993. All students are subject to the Code and are responsible for familiarizing themselves with it. If needed, copies may be obtained from the receptionist in ACC 101.
<b>Text</b>	K. A. Merchant & W. A. Van der Stede (2017), <i>Management Control Systems: Performance Measurement, Evaluation, and Incentives</i> . London: Financial Times/Prentice-Hall, 4th edition.

### Course Objectives

This course is designed to broaden and deepen your conceptual and technical understanding of accounting as it is used for management purposes. The emphasis in the course is on *financial controls*, which dominate in importance at managerial levels in all but the smallest organizations. Using financial controls requires managers to make decisions about: (1) responsibility structures (e.g., cost centers, profit centers), (2) performance measures (e.g., market, financial, and/or nonfinancial measures and their combinations), (3) performance evaluations, which take into consideration performance targets or other benchmarks, and (4) rewards (including performance-dependent compensation). The course is issue-oriented, with current and emerging issues as a major focus.

The course is built around a textbook—Merchant and Van der Stede's *Management Control Systems*. The text will be supplemented with some additional materials that will be distributed via Blackboard.

The focus of most of the classes will be on a case that brings the topics “to life” and provides issues for us to discuss. The readings are intended to provide background that is useful for informing the case discussions. For each case, I will provide some Discussion Questions. These questions are intended to help frame and focus your reading and consideration of the course materials.

The cases require advance preparation and thought. I encourage you to prepare the cases in a study group. Much of the learning comes from sharing and discussing your ideas with your peers.

## Grading

In-class quizzes	50 points
E-mail questions and class participation	50 points
Final exam	<u>100 points</u>
<i>Total</i>	<i>200 points</i>

The **quizzes** will be given in a few classes on an unannounced basis. As protection against the possibility of a bad day or an unlucky absence, in computing my course grades I will disregard the lowest quiz score.

On the bottom of many of the class assignments, you will see that I have included an “**e-mail question**.” Prior to noon before our class pertaining to that assignment, please send me an e-mail message answering the question(s) for that day's class. This is not intended to be a time-consuming obligation. Your answers should be brief—**three sentences or less** for each question.

Your answers to the e-mail questions serve multiple purposes. First, they help me to get to know you and to see how you think. Second, these messages open the communication channels between us. Since you have to send me a message, it is easy to append another thought. In the past, some students have used this opportunity to ask a question on another topic or to give me some feedback about the course. I welcome this. I might also respond immediately to your e-mail question answer. Third, your e-mail answers help me orient the class discussion. For example, they help me both to judge the mindset of the class and to find people with unique perspectives. Finally, the questions are functional because they encourage good advance preparation. The regularity with which you input your e-mail question answers on a timely basis and the quality of your answers will form part of your participation grade.

I assign a material proportion of the grade based on **class participation**. I do this for several reasons. First, it improves my grading accuracy. I think I can learn more from hearing you share your ideas in a long series of classes than I can from reading what you write in a short exam session. I keep track of participation in every class.

But perhaps more important than that, grading class participation motivates class participation, and having highly interactive class sessions helps the learning process. Active class participation encourages students to be well prepared and thus to become active, rather than

passive, learners. Participation provides students with the opportunity to gain from the experiences and talents of everyone in the class. Moreover, class participation helps students improve their oral communication skills. This is important because research shows that people in the business world tend to spend very little time reading and even less time writing reports. A great deal of managers' and other professionals' interactions with others are through oral communication.

Class participation evaluations will be based primarily on the quality of the participation in classroom discussions. To be clear on what I am looking for regarding class participation, and to further aid in your preparation, I have listed below some characteristics of effective class participation:

- (1) Does the student make points that are especially pertinent to the discussion? Do they increase the understanding of the class or are they simply a regurgitation of the problem or case facts?
- (2) Is there continuity in one's contribution from what has been said previously during class, or are the comments disjointed, isolated, or tangential? The best class contributions are those that reflect not only excellent preparation, but also good listening, interpretive, and integrative skills.
- (3) Do the comments reflect a willingness to put forth new, challenging ideas or are they always agreeable and "safe"?
- (4) Is the participant able and willing to interact with others by asking questions, providing supportive comments, or challenging **constructively** what has been said?

Your participation will be evaluated based on a near-continuous scale, the end points of which can be described as follows:

**Outstanding Contributor:** This person's contributions reflect exceptional preparation, and the ideas offered are always substantive and provide major insights and direction for the class. If this person were not a member of the class, the quality of the discussions would be diminished significantly.

**Unsatisfactory Contributor:** This person may be absent from class or someone who rarely participates in class discussion. Alternatively, this person's contribution in class reflects inadequate preparation and/or understanding. Ideas offered are not substantive and provide few, if any, insights and never a constructive direction for the class. Integrative comments and effective arguments are absent. Class comments are either obvious, isolated from the main discussion, or confusing to the class.

The **final exam** will be a take-home exam, likely a case or two. You can take this exam as an individual or as a group. The groups can be as large as four people. In the middle of the course, I will ask you to tell me if you will be taking the exam as an individual or in a group, and if in a group, who is included in your group. The answers to the final exam must be deposited in my mailbox in the lobby of the School of Accounting Building by the deadline.

## **Schedule of Classes**

### **Session 1**

#### **Topic: Performance Measurement and the Control Function of Management**

In this first class, we will go over the syllabus and get to know each other. Then I will provide a general lecture on management controls and the control uses of performance measures that we will focus on in this course. Finally, we will discuss a short case that will set the stage for our further discussions.

**Reading:** MV, Chapter 1

### **Session 2**

#### **Topic: Results Controls**

In this class, we will examine and critique the performance measurement and incentive system used in a business with which all of you have some familiarity—automobile retailing. The company is privately held, and it makes use of some “nonfinancial” performance measures. In the case, we see a simple use of transfer pricing. We will examine incentives at and below management levels of the organization. Moreover, we see some evidence of people “playing games” with the measures. Understanding the causes, consequences and remedies of game playing is a recurring theme in this course.

**Reading:** MV, Chapters 2 and 9

**Prepare for Class:** Case—Puente Hills Toyota

#### **Assignment Question:**

Evaluate the performance measurement and incentive systems used at Puente Hills Toyota. What changes would you recommend, if any?

#### **E-mail Question:**

As a first approximation, which of the following statements do you believe is most correct, and why:

- I. People are people. They respond approximately equally to many things, including pay-for-performance systems.
- II. To work well, management and incentive systems must be tailored to fit the specific employee group (e.g., nationality, role, age, and gender).

### **Session 3**

#### **Topic: Financial Responsibility Structures**

The focus of this session is on one of the main management control system choices—design of the organization's authority and financial responsibility structures.

**Reading:** MV, Chapter 7

**Prepare for Class:** Case—Kranworth Chair Corporation (KCC)

#### **Assignment Questions:**

1. Identify the most important key recurring decisions that must be made effectively for KCC to be successful. In KCC's functional organization, who had the authority to make these decisions? Who has the authority to make these decisions in KCC's new divisionalized organization?
2. Did KCC's top management go too far in decentralizing the corporation? Did they not go far enough? Or did they get it just right? Why?
3. Evaluate KCC's new performance measurement and incentive system. Assuming that KCC will retain its new divisionalized organization structure, what changes would you recommend, if any? Why?
4. Assume that the R&D function is to be decentralized (given to the divisions). Would this necessitate changes to KCC's performance measurement and incentive system? If so, which and why? If not, why not?

#### **E-mail Question:**

The vast majority of corporations are decentralized to a considerable degree. What kinds of organizations are best run in a largely *centralized* manner, and why?

### **Session 4**

#### **Topic: Planning and Budgeting**

Most firms beyond minimal size, but not all, engage in often extensive planning processes, the annual component of which is called budgeting. The Mainfreight case that we will discuss in this session, however, illustrates the functioning of a large, successful international logistics company that does *not* engage in an annual budgeting process. The goal in this case is to think about what budgeting is, and what it is not, and how Mainfreight can succeed without having a budget, which is a control system element that most companies think is essential. One of the key points of discussion of this session, therefore, is to consider whether there are valid, effective alternatives to budget-based performance management systems, and if so, whether these really are what they claim to be or just budgeting processes under a different guise?

**Reading:** MV, Chapter 8, and Chapter 3

**Prepare for Class:** Case—Mainfreight

**Assignment Questions:**

1. At the very least, Mainfreight's management systems are nontraditional.
  - a. What are the key elements of Mainfreight's results control systems?
  - b. Why did Mainfreight managers decide to take a nontraditional approach?
  - c. How does Mainfreight perform the functions typically fulfilled by budgets? Or are some of those functions really not that important?
  - d. Does the Mainfreight system address the limitations of traditional budgets? Does it introduce new limitations?
2. Is Mainfreight a well-controlled organization?
3. Should companies that now use an annual budgeting process try to emulate some or all of the management systems used by Mainfreight? Why or why not?

**E-mail Question:**

Mainfreight's top executives, three of whom are qualified accountants, maintain that their company does not prepare budgets. Is that contention accurate? How should one determine whether a company prepares a budget or not?

**Session 5**

**Topic: Performance Measures**

Today's discussion focuses on a company that does not place much emphasis on financial measures of performance. Why? What do they do instead?

**Reading:** MV, Chapters 10 and 11

**Prepare for Class:** Case—Catalytic Solutions, Inc.

**Assignment Question:**

Evaluate the CSI performance measurement and compensation systems. What changes would you suggest be made, if any? Explain.

**E-mail Question:**

Fast forward 10 years. Assume that CSI has been successful. It is now a much larger, public company. It has three operating divisions (investment centers) that focus on different markets. Would you expect the CSI measurement and compensation system to be different at that time? If so, how and why? If not, why not?



## **Session 6**

### **Topic: Performance evaluations**

In this class, we will continue our discussion of performance evaluations. How can/should firms deal with the effects of uncontrollable events that often obscure managers' impacts on performance measures?

**Reading:** MV, Chapter 12

**Prepare for Class:** Case 1—Olympic Car Wash

#### **Assignment Question:**

How large should the bonus pool be for the Aalst location?

**Prepare for Class:** Case 2—Beifang Chuang Ye Vehicle Group

#### **Assignment Question:**

To what extent, if at all, should Mr. Zhou provide incentive compensation for his employees when his company is losing money? Why? What factors did you take into consideration in making your judgment?

#### **E-mail Question:**

Some companies make performance evaluation and bonus adjustments to protect managers from the harmful effects of many uncontrollable factors. Other companies make no such adjustments. Is one of these approaches clearly inferior, or is this just a "management style" choice?

## **Session 7**

### **Topic: Enterprise Risk Management**

Our focus in this session is on enterprise risk management, a newly developing tool aimed at helping companies address all the various kinds of risks they might face.

**Prepare for Class:** Case—Entropic Communications, Inc.

#### **Assignment Questions:**

1. Why did Entropic implement a formal enterprise risk management (ERM) process?
2. Do you think the company realized the benefits of ERM as envisioned by COSO? Why or why not?
3. What changes would you suggest for making the ERM process at Entropic more effective?

#### **E-mail Question:**

ERM is currently one of the hottest topics being written about in management, accounting, and corporate governance practitioner journals. Virtually every company is looking at the technique

and deciding whether and how to use it. Do you think the ERM technique is a fad that will soon disappear or an improvement that will provide enduring benefits to a broad range of companies?

## **Session 8**

### **Topic: Management Control Impacts of the Sarbanes-Oxley Act**

In this session we will focus on the benefits and costs the Sarbanes-Oxley Act (SOX) from the corporate perspective.

**Reading:** MV, Chapter 13

**Prepare for Class:** Case—Pacific Sunwear of California, Inc.

#### **Assignment Questions:**

1. Evaluate the process that PacSun went through to comply with SOX, and particularly SOX Section 404. Was that process as effective and efficient as it could have been?
2. Are the “significant deficiencies” that were identified in each of the two years of the audit evidence of control system flaws or largely irrelevant technical violations? Another way to phrase this question might be: Should disclosure of these deficiencies have had a negative effect on PacSun’s stock price?
3. PacSun executives seem convinced that the costs of complying with SOX were greater than the benefits to the company. Why did PacSun not benefit from the compliance process to the same extent as some other companies? Or were their compliance costs just too high?

#### **E-mail Question:**

Judging now with some benefits of hindsight, was SOX a good law?

## **Session 9**

### **Topic: Earnings Management and the Roles of Controllers and CFOs**

In this session, we will examine some of the important roles that controllers and CFOs play in their organizations, particularly in times of stress.

**Reading:** MV, Chapter 14

**Prepare for Class:** Case—Don Russell: Experiences of a Controller/CFO

#### **Assignment Questions:**

1. Was Don Russell a good controller for Cook and Spector, Inc.? Why or why not?
2. Does Don have the power to force ETI top management to make a correcting accounting entry? If not, what should he do? If so, should he force the entry to be made, and how large should it be?

3. Are earnings management practices such as took place at C&S and ETI smart? Are they ethical?
4. Does Don Russell have an obligation greater than that of other employees to try to ensure that his corporation acts ethically?

**E-mail Question:**

All things considered, was Don Russell a good controller for Cook and Spector, Inc.? Did he deserve hearty congratulations and a nice bonus or a boot out the door? Explain briefly.

## **Session 10**

### **Topic: Corporate Governance and the Roles of Boards of Directors**

In this class, we will focus broadly on systems of corporate governance and the roles and obligations of boards of directors.

**Reading:** MV, Chapter 13 (already assigned for Session 9)

**Prepare for Class:** Case—Arrow Motorcar Corporation

**Assignment Questions:**

1. Why did Arrow Motorcar Corporation have a board of directors before it went public? How (if at all) do the legal and moral obligations of private-company directors differ from those of directors of publicly-held companies?
2. Evaluate the board composition and actions. All things considered, did the board act properly? Did the board members choose the optimal time to terminate Billy Ray Repko?
3. What should the board members do now (March 22, 2016)?
4. What could have prevented or minimized the problems that Arrow faced?

**E-mail Question:**

If the Sarbanes-Oxley law had been passed before the time of this case, do you think the problems faced by the board of Arrow Motorcar Corporation would have occurred? Explain.

## **Session 11**

### **Topic: Industry application: A Sales Incentive System**

Managers at Office Solutions, Inc., are considering a significant change in the compensation plan for some of the company's sales representatives. Are they on the right track? Can we give them suggestions for improvement of their ideas? I expect that the key managers at Office Solutions will be in our class to listen to our suggestions and to engage in an active discussion with the class.

**Prepare for Class:** Case—Office Solutions, Inc.

**Assignment Questions:**

1. Evaluate the new approach for compensating the sales representatives at Office Solutions. In your critique, consider, at a minimum:
  - The recognition of the two different types of representatives;
  - The performance measures;
  - The performance standards;
  - The forms, mixes and amounts of compensation.
2. Why are at least some of the representatives resistant to the change? How should that resistance be addressed?
3. Would Office Solutions be better off if all of its sales representatives were good at “hunting”? If so, how should the company move in that direction?

**E-mail Question:**

Bob Mairena has realized that most of his older sales representatives, those over the age of 50, are not good at generating new accounts (p. 6 in the case). Is this problem fixable, maybe through the compensation system, or should the company somehow find a way to employ only young reps? If the latter, how might that be accomplished?

**Session 12**

**Topic: Industry Application: A “billings scorecard”**

In this class, we will discuss an innovative results-control approach to solution of a problem that is usually addressed with development and enforcement of sets of policies and procedures.

**Reading:** MV, Chapter 6

**Prepare for Class:** Case—Game Shop, Inc.

**Assignment Questions:**

1. Why was GSI’s production quality control performance so much better than its billing performance?
2. Evaluate the billing improvement effort and each of the elements of the system that emerged. Comment specifically on the billing scorecard, detention meetings, P-CARs, and any other system elements that you believe are relevant.
  - a. In considering the scorecard, be sure to address the following questions: What are the Scorecard and each of its measures trying to accomplish? Are these the right measures? Does each measure add unique value? Are the measures weighted appropriately in importance? Are the business unit grades generally consistent across measures? Can any of the measures be distorted or gamed?

- b. Do you believe that David's improvement efforts will close the gap between production and billing performance enough to meet project goals? Explain?
  - c. Do you have any suggestions to improve the billing process? Explain.
3. GSI's ultimate goal is "perfection." Can this system be used to achieve billing perfection as it is designed, or will changes have to be made, or might even a totally different approach be necessary? Explain.
4. The Billing Scorecard is a results-accountability approach to address the problem, chosen because this company's culture is "metrics centric." What are the advantages and disadvantages of using a results-accountability approach? What other alternatives might have been used to solve the problem?

**E-mail Question:**

Would you include billing performance among a short list of "critical success factors" for GSI? If so, why has it apparently not received much attention from management up until now? If not, why all the concern now?

**Session 13**

**Topic: Industry application: A bank**

In this session, we will focus on the performance measurement/management control challenges in the wholesale banking industry.

**Reading:** MV, Chapters 4, 5

**Prepare for Class:** Case—Haengbok Bancorp

**Assignment Questions:**

1. Evaluate Haengbok Bancorp's system of controlling the behaviors of the account managers in the Los Angeles branch. What changes would you suggest be made, if any? Explain. In your answer, comment specifically on the merits and demerits of the control philosophy and each of the significant individual control system elements, such as the use of mini profit centers and the associated performance measures and incentives.
2. Discuss the FETC loan application situation and the effects that outcome might have on the account managers' behaviors and performances? Does this example illustrate a problem that needs to be fixed? If not, why not? If so, how would you fix it? Explain.

**E-mail Question:**

Are any of the issues in this case or their preferred solutions affected in any way by the fact that the bank and its managers are Korean, rather than, say, American, French, or Chinese?

## **Session 14**

### **Topic: Industry Application: A Hedge Fund**

In this class, we will discuss issues related to performance evaluation and incentive compensation in a hedge fund. Our primary focus will be on the role of the hedge fund analysts.

**Prepare for Class:** Case—Raven Capital, LLC

#### **Assignment Questions:**

1. Assume the role of a Raven portfolio manager who has to allocate a bonus pool to the four analysts working primarily for him. Assume a 20% incentive fee for Raven. Use 30% of the incentive fee as the bonus pool to be allocated to the four analysts whose backgrounds and 2009 portfolio performances are described in Assignment Figures A and B (posted separately on Blackboard).
  - a. How would you allocate bonuses to these four analysts? What alternatives did you consider? Why did you make the choices you did?
  - b. Is there any other information you would like to have had available before making your decisions? If so, which?
  - c. Do you think you should pay out the entire bonus pool this year, or hold some money in a “bonus bank reserve”? Why or why not?
  - d. Should the proportions of the bonuses allocated vary depending on the size of the bonus pool available? Redo the allocations of the bonus pool to these four analysts assuming that because of a high water mark constraint, the incentive fees earned in 2009 were only \$300,000.
2. Evaluate the Raven performance evaluation and incentive compensation system. What changes would you recommend, if any?

#### **E-mail Question:**

What could Raven management do to make it possible to evaluate the analysts' performances more objectively? Should they make these changes?

After we discuss this case, I will provide a brief review of the major themes of the course and will hand out the final exam. It will be a take-home exam that is due in my mailbox, in the lobby of the Accounting building, by 5:00 p.m. on Thursday next week. You can work on the exam only in the group to which we agree you have been assigned.

# Model Syllabus 2

## London School of Economics

Department of Accounting

AC310

### Advanced Managerial Accounting

Module 1

Michaelmas Term (Weeks 1–5)

#### Management Accounting in its Organizational Context: The Function of Management Control Systems

Professor Wim A. Van der Stede

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Tel. 020 7955 6695

### Introduction

Module 1 of AC310 is focused on the study of the quintessential role of management control in decentralized organizations. Our focus will be on the measurement and evaluation of the performances of organizational entities and their managers. Management accounting at this level of analysis is an integral part of companies' *management control systems*.

In this module, we will discuss what it means to have an organization be “in control,” what alternatives managers have for ensuring good control, and how managers should choose from among control system alternatives. Then we will focus on each of the elements of “financial control systems,” which provide the dominant form of control in the vast majority of decentralized organizations. These elements include financial target setting (as part of organizations' planning and budgeting processes), performance measurement and evaluation, and the assignment of various forms of organizational rewards, such as bonuses and promotions.

This module is intended as an introduction for individuals who will make business decisions, evaluate organizational performance, or evaluate others (and/or be evaluated) through the use of financial and nonfinancial information. In other words, the module is designed to be useful particularly for those who aspire to be managers, management consultants, or specialists in staff functions such as controllers, financial analysts, auditors, and human resource specialists.

## Teaching Format

This module is taught as five lectures and five classes, and the materials in this module will be presented through both lectures and case study analyses. The case studies permit the exploration of management control issues in a broad range of settings (e.g., large and small firms, manufacturing and service firms, multinational firms, start-ups). Moreover, the foundational theories for the topics in this module have been introduced in AC211. An important objective of this module is, therefore, (1) to expand that knowledge through further study, and (2) to apply that knowledge to cases.

The case method of instruction, however, requires good advance preparation by the students. For the cases that we discuss in *class* settings, I expect *every* student to actively participate in the case analysis and discussion. Although during *lectures* not every student will have an opportunity to contribute to the discussion, I still expect active participation when I pose questions or solicit input from the students.

## Course Materials

Merchant, Kenneth A., and Wim A. Van der Stede (2017), *Management Control Systems: Performance Measurement, Evaluation, and Incentives* (Prentice-Hall/Financial Times), 4th Edition. (Referred to as **MCS** in the schedule below.)

Some additional materials are distributed separately in the **course pack**.

## Written Work

You are expected to hand in one essay for this module drawn from the list of “essay questions” listed throughout the schedule below. Because each essay question is related to a case study, you must turn in your essay of choice *at the beginning* of the session in which the case is discussed. An essay that is handed in after the case has been discussed in class will not be marked.

## Assessment

Assessment will be based wholly upon a 3-hour written examination during the Summer Term covering exam questions from across all four modules of this course. Past examination papers are available on the Library’s website.

## Module Schedule

### ***Week 1—The Control Function of Management***

**Lecture 1:** MCS Chapters 1–6

**Class 1:** *Puente Hills Toyota*



**Case Questions** (for advance preparation):

1. Evaluate the performance measurement and incentive systems in use at Puente Hills Toyota in terms of their overall effectiveness as a “results control” system.
2. Elaborate specifically on the specific features of the results control system in place at Puente Hills Toyota—strengths and weaknesses?
3. What factors are critical for Puente Hills Toyota’s success? What changes would you recommend, if any?

**Essay Question** (for written work): Considering that Puente Hills Toyota’s is probably quite a “typical” incentive system one might find in customer-driven, sales-focused organizations (in the United States), please comment on the following statement:

People are people and they respond equally to many things, including pay-for-performance systems, and thus incentive systems will work well anywhere and in any organization.

**Week 2—Results Accountability**

**Lecture 2:** MCS Chapter 7

**Class 2:** *Kranworth Chair Corporation*

**Case Questions** (for advance preparation):

1. Identify the most important key recurring decisions that must be made effectively for Kranworth Chair Corporation (KCC) to be successful. In KCC’s functional organization, who had the authority to make these decisions? Who has the authority to make these decisions in KCC’s new divisionalized organization?
2. Did KCC top management go too far in decentralizing the corporation? Did they not go far enough? Or did they get it just right? Why?
3. Evaluate KCC’s new performance measurement and incentive system. Assuming that KCC will retain its new divisionalized organization structure, what changes would you recommend, if any? Why?

**Week 3—Planning and Budgeting**

**Lecture 3:** MCS Chapter 8; and,

Hansen, Stephen C., David T. Otley, & Wim A. Van der Stede (2003). Recent Developments in Budgeting: An Overview and Research Perspective. *Journal of Management Accounting Research* 15, pp. 95–116.

**Class 3:** *Mainfreight*

**Case Question** (for advance preparation),

1. At the very least, Mainfreight's management systems are nontraditional.
  - a. What are the key elements of Mainfreight's results control systems?
  - b. Why did Mainfreight managers decide to take a nontraditional approach?
  - c. How does Mainfreight perform the functions typically fulfilled by budgets? Or are some of those functions really not that important?
  - d. Does the Mainfreight system address the limitations of traditional budgets? Does it introduce new limitations?
2. Is Mainfreight a well-controlled organization?
3. Should companies that now use an annual budgeting process try to emulate some or all of the management systems used by Mainfreight? Why or why not?

**Essay Question** (for written work): Mainfreight's top executives, three of whom are qualified accountants, maintain that their company does not prepare budgets. Is that contention accurate? How should one determine whether a company prepares a budget or not?

**Week 4—Performance Measurement**

**Lecture 4:** MCS Chapters 10–12; and,

Kaplan Robert S. & David Norton (2005), *The Balanced Scorecard: Measures that Drive Performance*, *Harvard Business Review*, July-August, pp. 172–180.

Ittner, Christopher D., & David F. Larcker (2003), *Coming up Short on Nonfinancial Performance Measurement*, *Harvard Business Review*, November, pp. 88–95.

**Class 4:** *Catalytic Solutions, Inc.*

**Case Questions** (for advance preparation):

1. Evaluate the composition of the compensation package at CSI.
  - a. What are the advantages and disadvantages of awarding stock options?
  - b. What are the advantages and disadvantages of awarding bonuses?
  - c. Was the relative importance placed on salaries, stock options, and bonus awards reasonable? Why should CSI offer a mix of rewards rather than providing its employees 100% of their compensation based on 100% salary? On 100% annual bonuses?
2. Evaluate the specific features of the annual bonus plan in 2001 and 2002. Comment on:
  - a. the choice of the number of measures used, the specific measures used, and the changes in the plan between years;
  - b. the relative proportions of financial vs. nonfinancial measures;
  - c. the decision to base rewards on company-wide, rather than individual, performance;

- d. the amount of subjectivity allowed in determining the bonus awards;
- e. the calibration (target difficulty) of the bonus plans.

**Essay Question** (for written work): Fast-forward 10 years. Assume that CSI has been successful. It is now a much larger, public company. It has three operating divisions (investment centers) that focus on different markets. What would you expect the CSI measurement and compensation systems to look like at that time? Why?

## **Week 5—Incentive Systems**

**Lecture 5:** MCS Chapter 9; and,

Van der Stede, Wim A. (2007), The Pitfalls of Pay-for-Performance, *Finance & Management*, 150, December, 10–13.

Van der Stede, Wim A. (2009), Designing Effective Reward Systems, *Finance & Management*, 168, October, 6–9.

**Class 5:** *Houston Fearless 76, Inc.*

**Case Questions** (for advance preparation):

1. Why are Houston Fearless 76, Inc. (HF76) managers unhappy with the company's existing sales incentive plan? Are weaknesses in this plan a major cause of the company's performance problems?
2. Evaluate the new incentive plan being contemplated. What modifications would you make to the proposed new plan, if any? How would you address the unresolved issues?
3. Are there any significant impediments to the successful implementation of the new incentive plan? If so, which?
4. Would you make any changes to the system providing bonuses to sales assistants? If so, which?

# Model Syllabus 3

## Accounting 537—Management Control Systems

Marshall School of Business, University of Southern California

<b>Professor</b>	Kenneth A. Merchant
<b>Office</b>	HOH 606
<b>Telephone</b>	(213) 821-5920
<b>E-mail</b>	kmerchant@marshall.usc.edu
<b>Class Hours</b>	Tue/Thu 12:30–1:50 p.m.
<b>Classroom</b>	JKP 202
<b>Office Hours</b>	By appointment. Arrange by e-mail. I will do my best to accommodate your schedule.
<b>Honor Code</b>	Students are expected to adhere to, and will be bound by, the University and School policies governing academic integrity.
<b>Text</b>	K. A. Merchant & W. A. Van der Stede (2017), <i>Management Control Systems: Performance Measurement, Evaluation, and Incentives</i> . London: Financial Times/Prentice-Hall, 4th edition.

### Course Objectives

Firms' performance evaluation and incentive systems require managers to make many choices. They must design responsibility structures. If performance is defined in accounting terms, as is common at managerial levels of the firm, these structures are composed of configurations of cost centers, revenue centers, profit centers, and investment centers. They have to choose specific performance measures and make them operational. Just within the category of accounting-based measures, which are in common use, are measures with acronyms such as EBITDA, ROE, RONA, ROCE, ROI, RAROC, and RI. And, of course, many market-based and nonfinancial measures are also used frequently. Managers must select measurement windows (e.g., month, quarter, annual, multi-year) for any of the measures chosen. And they have to define the links between the measured performance and various forms of organizational rewards and punishments. Unless all of these choices are made well, problems can result. These systems can frustrate and demotivate employees or, worse, actually encourage them to do the wrong things.

This course presents knowledge of these “results-accountability” systems, with current practice and emerging issues as a major focus. Among the issues, we will discuss the advantages and disadvantages of traditional financial measures and nontraditional measures

such as EVA, EBITDA, and “pro-forma” earnings, as well as nonfinancial measures (e.g., customer satisfaction) and combinations found in dashboards and balanced scorecards. We will also discuss incentives-related topics, such as “stress-testing” and resource allocation uses of financial plans, the “beyond budgeting” movement, performance assessment by internal and operational auditors, and management implications of the Sarbanes-Oxley Act and the still-developing enterprise risk management (ERM) techniques.

The focus of most of the classes will be on discussions of specific cases developed from real-world practice. The assigned readings are intended to provide background that is useful for informing the case discussions. For each case assignment, I provide some Discussion Questions. These questions are intended to help frame and focus your reading and consideration of the course materials. In a number of the classes, I will invite a practitioner visitor to class both to add expertise and to “bring the topics to life.”

The course is built around a textbook—Merchant and Van der Stede’s *Management Control Systems*. The text is supplemented with a short monograph (de Kluyver’s *A Primer on Corporate Governance*):

(MV) K. A. Merchant & W. A. Van der Stede (2017), *Management Control Systems* (London: Financial Times/Prentice-Hall), 4th edition.

(deK) C. de Kluyver (2009), *A Primer on Corporate Governance* (New York: Business Expert Press).

Some additional materials also will be distributed on Blackboard.

## Grading

Quizzes	40 points
Project 1	40 points
Project 2	40 points
Project 3	40 points
Class participation	40 points
Final exam	<u>100 points</u>
<i>Total</i>	<i>300 points</i>

## Quizzes and Exams

The quizzes and the final exam will test **individual** (not group) work. The **quizzes** will focus on specific issues in the case being discussed that day in class. The **final exam**, will be a take-home exam in lieu of an exam during the final exam period. It will involve a case analysis. No make-up exams will be given (see LSOA policy on incompletes).

## Projects

The projects will involve group analyses of cases that are supported by data provided on Excel spreadsheets. The first project is a capital budgeting exercise. The second is a budget “stress testing” exercise. The third involves comparative performance evaluations of a large number of bank branches. Some groups will be asked to present their analyses and conclusions in class.

Students can form their own working groups, but I will help if needed. The optimum (and maximum) group size is four. I will accept groups as small as three. As part of the grading process, I will ask students to grade each of their fellow group members. This is done to try to reduce the “free-rider” effect.

## Class Participation

I assign a material proportion of the grade based on **class participation** for several reasons. First, it improves my grading accuracy. I think I can learn more from hearing you share your ideas in a long series of classes than I can from reading what you write in a few short exam sessions.

But perhaps more important than that, grading class participation motivates class participation, and having highly interactive class sessions helps the learning process. Active class participation encourages students to be well prepared and thus to become active, rather than passive, learners. Participation provides students with the opportunity to gain from the experiences and talents of everyone in the class. And class participation helps students improve their oral communication skills. This is important because research shows that people in business tend to spend very little time reading and even less time writing reports. A great deal of managers’ and other professionals’ interactions with others are through oral communication.

Class participation evaluation will be based primarily on the quality of the participation in classroom discussions. To be clear on what I am looking for regarding class participation, and to further aid in your preparation, I have listed below some characteristics of effective class participation:

- (1) Does the class member make points that are especially pertinent to the discussion? Do they increase the understanding of the class or are they simply a regurgitation of the problem or case facts?
- (2) Is there continuity in one’s contribution from what has been said previously during class, or are the comments disjointed, isolated, or tangential? The best class contributions are those that reflect not only excellent preparation, but also good listening, interpretive and integrative skills.
- (3) Do the comments reflect a willingness to put forth new, challenging ideas or are they always agreeable and “safe”?
- (4) Is the participant able and willing to interact with others by asking questions, providing supportive comments or challenging **constructively** what has been said?

Participation will be evaluated based on a near-continuous scale, the end points of which can be described as follows:

**Outstanding Contributor:** This person's contributions reflect exceptional preparation, and the ideas offered are always substantive and provide major insights and direction for the class. If this person were not a member of the class, the quality of the discussions would be diminished significantly.

**Unsatisfactory Contributor:** This person may be absent from class or someone who rarely participates in class discussion. Alternatively, this person's contribution in class reflects inadequate preparation and/or understanding. Ideas offered are not substantive and provide few, if any, insights and never a constructive direction for the class. Integrative comments and effective arguments are absent. Class comments are either obvious, isolated from the main discussion, or confusing to the class.

## E-Mail Questions

On the bottom of many of the class assignments, you will see that I have included an "e-mail question." Prior to noon before each of our classes, please send me an e-mail message or private Blackboard posting answering the question(s) for that day's class. This is not intended to be a time-consuming obligation. Your answers should be brief—**three sentences or less** for each question.

Your answers to the e-mail questions serve multiple purposes. First, they help me to get to know you and how you think. Second, these messages open the communication channels between us. Since you have to send me a message, it is easy to append another thought. In the past some students have used this opportunity to ask a question on another topic or to give me some feedback about the course. I welcome this. Third, your e-mail answers help me orient the class discussion. For example, they help me both to judge the mindset of the class and to find people with unique perspectives. Finally, the questions are functional because they encourage good advance preparation. The regularity with which you input your e-mail question answers on a timely basis and the quality of your answers will form part of your participation grade.

## Schedule of Classes

### **Session 1**

#### **Topic: The Control Function of Management**

In this first session, we will go over the syllabus and get to know each other. Then I will provide a general lecture on managers' control options. Finally, we will discuss a control vignette.

**Reading:** MV, Chapters 1–4

## **Session 2**

### **Topic: Control System Alternatives and What Can Go Wrong**

No MCS is perfect. Some controls fail, and others cost more than the benefits they provide. Today we will examine a company that suffered significant problems. Could they have been prevented? If so, how?

**Reading:** MV, Chapter 5

**Prepare for Class:** Case—Atlanta Home Loan

#### **Assignment Questions:**

1. Identify the devices (controls) that Al Fiorini used to control his business both before and after he went back to school. Classify each control as a results, action, or personnel or cultural type of control.
2. What went wrong? Did Al use the wrong types of controls? Did he use the right types of controls but fail to design or implement them properly? Or was he just unlucky?

#### **E-mail Question:**

What should Al Fiorini do now? Why?

## **Session 3**

### **Topic: Evaluating Control System Alternatives**

Today's case illustrates the control system used in a field service engineer (FSE) setting. The case is particularly interesting because the company, Diagnostic Products Corporation (DPC), is in the midst of a significant change. Formerly, company managers controlled FSE inputs—they paid FSEs for hours worked. Now they are attempting to measure FSE outputs, or results, and to provide performance-dependent compensation.

**Reading:** MV, Chapter 6

**Prepare for Class:** Case—Diagnostic Products Corporation (DPC)

#### **Assignment Question:**

Evaluate the design of the DPC Performance Bonus Program for U.S.-based field service engineers (FSEs) as it currently exists and the way in which the Program is being implemented. What changes would you suggest, if any?

#### **E-mail Question:**

Instead of using a results-control system like the Performance Bonus Program could DPC control its U.S.-based FSEs effectively using only action and/or personnel/cultural controls?



## **Session 4**

### **Topic: Financial Responsibility Structures**

The focus of this session is on one of the main management control system choices—design of the organization's authority and financial responsibility structures.

**Reading:** MV, Chapter 7

**Prepare for Class:** Case—Kranworth Chair Corporation

#### **Assignment Questions:**

1. Identify the most important key recurring decisions that must be made effectively for KCC to be successful. In KCC's functional organization, who had the authority to make these decisions? Who has the authority to make these decisions in KCC's new divisionalized organization?
2. Did KCC top management go too far in decentralizing the corporation? Did they not go far enough? Or did they get it just right? Why?
3. Evaluate KCC's new performance measurement and incentive system. Assuming that KCC will retain its new divisionalized organization structure, what changes would you recommend, if any? Why?
4. Assume that the R&D function is to be decentralized (given to the divisions). Would this necessitate changes to KCC's performance measurement and incentive system? If so, which and why? If not, why not?

#### **E-mail Question:**

The vast majority of corporations are decentralized to a considerable degree. What kinds of organizations are best run in a largely *centralized* manner, and why?

## **Session 5**

### **Topic: Interdependence and the Transfer Pricing Problem**

Where products or services are provided by one organizational entity to another, difficult cost allocation or transfer pricing problems often follow. In this session, we will discuss a representative example.

**Prepare for Class:** Case—Zumwald AG

#### **Assignment Questions:**

1. What sourcing decision for the X73 materials is in the best interest of:
  - a. The Imaging Systems Division?

- b. The Heidelberg Division?
  - c. The Electronic Components Division?
  - d. Zumwald AG?
2. What should Mr. Fettinger do?

**E-mail Question:**

Is a transfer price just a cost allocation with a profit margin tacked onto it? Explain.

**Session 6**

**Topic: Planning and Budgeting**

Most firms beyond minimal size, but not all, engage in often extensive planning processes, the annual component of which is called budgeting. The Mainfreight case that we will discuss in this session, however, illustrates the functioning of a large, successful international logistics company that does *not* engage in an annual budgeting process. The goal in this case is to think about what budgeting is, and what it is not, and how Mainfreight can succeed without having a budget, which is a control system element that most companies think is essential. One of the key points of discussion of this session, therefore, is to consider whether there are valid, effective alternatives to budget-based performance management systems, and if so, whether these really are what they claim to be or just budgeting processes under a different guise?

**Reading:** MV, Chapter 8

**Prepare for Class:** Case—Mainfreight

**Assignment Questions:**

1. At the very least, Mainfreight's management systems are nontraditional.
  - a. What are the key elements of Mainfreight's results control systems?
  - b. Why did Mainfreight managers decide to take a nontraditional approach?
  - c. How does Mainfreight perform the functions typically fulfilled by budgets? Or are some of those functions really not that important?
  - d. Does the Mainfreight system address the limitations of traditional budgets? Does it introduce new limitations?
2. Is Mainfreight a well-controlled organization?
3. Should companies that now use an annual budgeting process try to emulate some or all of the management systems used by Mainfreight? Why or why not?

**E-mail Question:**

Mainfreight's top executives, three of whom are qualified accountants, maintain that their company does not prepare budgets. Is that contention accurate? How should one determine whether a company prepares a budget or not?

**Note:** The names of the individuals working on the two group projects are due to me by the start of this class. The optimum (and maximum) group size is four. Groups of three are permissible. Please have a representative send me an e-mail message with the names of the individuals in your group.

**Session 7**

**Topic: Business Models and Resource Allocations (Group Project #1)**

Many resource allocation decisions are made during companies' planning and budgeting processes. Obviously companies want to make good investments, but is maximizing NPV (or IRR) always the most important decision-making criterion?

**Prepare for Class:** Case—Vitesse Semiconductor Corporation

**Assignment Questions:**

The detailed assignment for the Vitesse Semiconductor Corporation case is distributed in the assignments section of Blackboard. For this project you will hand in a report. There will be no in-class group presentations beyond needing to be ready to speak when being called as we discuss the case as usual.

**Session 8**

**Topic: Results Controls (or Not)**

In this session, we will examine and critique the performance measurement and incentive systems in two companies in an industry with which all of you have some familiarity—automobile retailing. The two companies' systems are quite different. Can we say which one is the better design?

**Reading:** MV, Chapter 9

**Prepare for Class:** Cases—Puente Hills Toyota

Kooistra Autogroep

**Assignment Questions:**

1. Compare and contrast the performance measurement and incentive systems used at Puente Hills Toyota and Kooistra Autogroep.
2. When comparing the use of incentives in the two companies, do you believe that incentive pay is truly effort-inducing; that is, does it drive employees to perform at their best? If you believe incentive pay is not, in whole or in part, effective in making employees work harder, then what

other potentially useful purposes does variable incentive pay provide for organizations relying on it, if any?

3. What advice would you provide to the managers of these companies?

**E-mail Question:**

As a first approximation, which of the following statements do you believe is most correct, and why:

- I. People are people. They respond approximately equally to many things, including incentive systems.
- II. To work well, a company's incentive systems must be tailored in many ways to fit the specific desires of various employee groups.

**Session 9**

**Topic: Summary Financial Performance Measures: Advantages and Limitations**

There are many forms of summary financial performance measures. Are some better than others?

**Reading:** MV, Chapter 10

**Prepare for Class:** Case—Behavioral Implications of Airline Depreciation Accounting Policy Choices

**Assignment Questions:**

Assume that at least some rewards for the management team (and, hence, also other employees) are based on performance measured in terms of accounting income and returns on net assets. Also assume that all of these airlines are growing; that is, they are adding to their fleet of aircraft.

1. What are the behavioral implications of each of the three depreciation-related accounting policy choices:
  - a. depreciation patterns (i.e., straight-line vs. accelerated);
  - b. estimated useful lives; and
  - c. residual values?

Consider, at a minimum, the effects of each of these choices on decisions regarding:

- a. replacements of aircraft in service;
- b. pricing, assuming that prices are at least somewhat dependent on costs;
- c. evaluations of routes or lines of business;
- d. evaluations of managers, assuming that negotiated budgets provide the primary standards of performance.

2. Assume that in a particular U.S. airline company there is a conflict between the benefits of conservatism vs. liberalism in depreciation accounting. That is, for this company conservatism in depreciation accounting is greatly preferred for financial reporting purposes (for whatever reason) but for internal purposes the company would be better off if the policies were more liberal, or vice versa. Would you recommend to the managers of this company that they adopt a third set of books? That is, should they maintain one set of books for financial accounting purposes, another set for tax purposes, and a third set for the purposes of running the business?
3. If the managers of a particular airline do not want to maintain a third set of books, should they tend to be conservative or liberal in their aircraft depreciation accounting?

**E-mail Question:**

International Financial Reporting Standards (IFRS) are less prescriptive than current U.S. GAAP, and the interpretive guidance that is provided is more limited. More judgment is needed by managers in firms following IFRS, so this question will become more relevant after U.S. firms shift over to IFRS: Should judgments about financial reporting policies be affected significantly by concerns about the possible effects on behaviors of employees of the firm, or should they be chosen solely based on judgments about what is perceived to provide the best financial reporting disclosures?

**Session 10**

**Topic: New “Improved” Summary Financial Measures of Performance**

We will start discussing the performance measurement element of financial control systems. In this session, we will discuss some relatively new financial performance measures that are said to be improved because they provide better indications of value creation. These are essentially modifications of accounting “residual income” that have been given labels with some marketing appeal, such as “economic profit” or “economic value added.”

**Prepare for Class:** Case—Berkshire Industries, Inc.

**Assignment Questions:**

1. Were Berkshire’s motivations for a new incentive system reasonable? If so, what were their main options for a new system? Was an economic profit-focused system a reasonable choice?
2. Evaluate the Berkshire Industries’ new incentive plan. What changes would you recommend, if any?
3. What, if anything, should Mr. Embleton do about the problems caused by performance shortfalls in the Spirits Division? Explain.

**E-mail Question:**

Would an economic profit-based incentive compensation system similar to that used by Berkshire be effective in an Internet start-up company? Why or why not?

## **Session 11**

### **Topic: Market Measures of Performance**

Today our focus is on market measures of performance and, in particular, the incentive effects of stock option grants.

**Reading:** MV, Chapter 11

**Prepare for Class:** Case—Superconductor Technologies, Inc.

#### **Assignment Questions:**

1. Evaluate the performance measurement and incentive system that STI uses for its top-30 managers. Among the questions you should consider:
  - a. Will the system attract managers' attention and influence behavior in the desired ways?
  - b. Is the system achieving other (nonmotivational) purposes that it is also intended to serve?
  - c. Is each of the elements worth the cost?
  - d. Is the mix of rewards optimal?
  - e. What changes would you recommend, if any?
2. Should the accounting treatment matter? That is should the accounting rule change requiring the immediate expensing of the value of stock options granted (which has now happened) have caused STI to make any changes to its system? If so, which?
3. Will STI have to make changes to its system if and when it expands internationally and employs managers in locations such as London and Shanghai? If so, which?

#### **E-mail Question:**

Assume that you, as an STI employee, were awarded options on 100,000 shares of STI stock (symbol: SCON) at market close yesterday at the current market price. Without doing a detailed numerical calculation, what would you estimate the value of that option grant to be for you? (That is, what is the minimum price at which you would be willing to sell the options immediately?) What factors did you consider in making your estimate?

## **Session 12**

### **Topic: Combinations of Measures: KPIs, Dashboards, and Balanced Scorecards**

The focus of this session is on the concurrent use of multiple performance measures. The most popular combination-of-measures system is marketed under the rubric "Balanced Scorecard." But some variations are given alternative names, such as dashboards, KPIs, and performance prisms.

**Prepare for Class:** Case: Johansen's—The New Scorecard System

**Assignment Questions:**

1. Why has Johansen's introduced the new scorecard system?
2. What is the company's strategy? What are the key success factors for successfully implementing that strategy? Describe the organizational structure in place at the company.
3. Consider each of the four perspectives of Johansen's new scorecard system. Why are they included? How are they measured?
4. What rating do you advocate awarding Clark? What are the key arguments you use to support that rating?

**E-mail Question:**

- What kinds of companies should implement a basket-of-measures approach, such as balanced scorecard, rather than just monitoring and rewarding their general managers' performances based on a single bottom-line summary performance measure?

**Session 13**

**Topic: The Planning Role of Budgets: Business Stress Testing (Group Project #2)**

As you should know by now, planning is decision-making in advance. Using the financial statement format in a future-looking sense (i.e., budgeting) allows managers to anticipate what might be coming their way in various plausible scenarios.

Case: VisuSon, Inc.

There is no assignment due for this class and, in fact, *we will not meet for this class period*. You can use the time to work on Group Project #2. The assignment is posted on Blackboard. We will hear some of the presentations and will discuss the case in the next class.

**Session 14**

**Topic: The Planning Role of Budgets: Business Stress Testing (cont.)**

In this class session, we will consider the work you have done for your first group project. Some of the groups will present their findings. The group presentations will either reinforce each other or, if they are different, we will compare and contrast them.

Case—VisuSon, Inc.

## **Session 15**

### **Topic: Performance Evaluations: Adjusting for the Effects of “Uncontrollables”**

In this class, we will continue our discussion of performance evaluations. How can/should firms deal with the effects of uncontrollable events that often obscure managers' impacts on performance measures?

**Reading:** MV, Chapter 12

**Prepare for Class:** Cases—Olympic Car Wash

Beifang Chuang Ye Vehicle Group

#### **Assignment Questions:**

For *Olympic Car Wash*:

How large should the bonus pool be for the Aalst location?

For *Beifang Chuang Ye Vehicle Group*:

To what extent, if at all, should Mr. Zhou provide incentive compensation for his employees when his company is losing money? Why? What factors did you take into consideration in making your judgment?

#### **E-mail Question:**

Some companies make performance evaluation and bonus adjustments to protect managers from the harmful effects of many uncontrollable factors. Other companies make no such adjustments. Is one of these approaches clearly inferior, or is this just a “management style” choice?

## **Session 16**

### **Topic: Performance Evaluations (Preparation for Group Project #3)**

Class cancelled to allow time to work on Group Project #3.

## **Session 17**

### **Topic: Performance Evaluations (Presentations of Group Project #3)**

In the first part of this session, a few randomly selected groups will present the findings of the performance evaluation group project exercise. The assignment and the *Bank of the Desert* database that go with it are posted on Blackboard. In the last part of the class (I hope), an expert class visitor will provide both some reactions about what he just heard you present and some color about how this real world consulting project unfolded.



## **Session 18**

### **Topic: Ethical Issues and Analyses and an Industry Application: Retail Brokerage**

In this session, we will focus on the management control challenges in the retail brokerage industry. I hope to have an expert guest with us for the class. I have assigned the ethics chapter of the textbook for reading because I want you to be able to identify ethical issues in the cases (and in real life) where they exist. There might be such an issue in the case assigned for this class.

**Reading:** MV, Chapter 15

**Prepare for Class:** Case—Philip Anderson

#### **Assignment Questions:**

1. What are the proper roles of (a) stock broker and (2) branch manager? That is, what does the company want them to do? What distinguishes someone who is performing well in each of these roles from someone who is not?
2. What control system does Stuart & Co. use to ensure that the brokers and managers perform their roles well? Is it likely to be effective?

#### **E-mail Question:**

Do you see any potential ethical issues in this case? If so, what, and how did you identify it as an ethical issue?

## **Session 19**

### **Topic: The Role of Controller: Issues and Dilemmas**

In this session, we will discuss a case that allows us to consider the role of controller/CFO in a more stressful time.

**Reading:** MV, Chapter 14

**Prepare for Class:** Case—Don Russell: Experiences of a Controller/CFO

#### **Assignment Questions:**

1. Does Don have the power to force ETI top management to make a correcting accounting entry? If not, what should he do? If so, should he force the entry to be made, and how large should it be?
2. Are earnings management practices such as took place at C&S and ETI smart? Are they ethical?
3. Does Don Russell have an obligation greater than that of other employees to try to ensure that his corporation acts ethically?

**E-mail Question:**

All things considered, was Don Russell a good controller for Cook and Spector, Inc.? Did he deserve hearty congratulations and a nice bonus or a boot out the door? Explain briefly.

**Session 20**

**Topic: Control Impacts of the Sarbanes-Oxley Act**

In this session, we will focus on the benefits and costs to corporations of the Sarbanes-Oxley Act (SOX).

**Reading:** MV, Chapter 13

**Prepare for Class:** Case—Pacific Sunwear of California, Inc.

**Assignment Questions:**

1. Evaluate the process that PacSun went through to comply with SOX, and particularly SOX Section 404. Was that process as effective and efficient as it could have been?
2. Are the “significant deficiencies” that were identified in each of the two years of the audit evidence of control system flaws or largely irrelevant technical violations? Another way to phrase this question might be: Should disclosure of these deficiencies have had a negative effect on PacSun’s stock price?
3. PacSun executives seem convinced that the costs of complying with SOX were greater than the benefits to the company. Why did PacSun not benefit from the compliance process to the same extent as some other companies? Or were their compliance costs too high?

**E-mail Question:**

Judging now with some benefits of hindsight, was SOX a good law?

**Session 21**

**Topic: Corporate Governance and the Roles of Boards of Directors**

In this class, we will focus broadly on systems of corporate governance and the roles and obligations of boards of directors.

**Reading:** deK, Chapters 1–3

**Prepare for Class:** Case—Arrow Motorcar Corporation

**Assignment Questions:**

1. Why did Arrow Motorcar Corporation have a board of directors before it went public? How (if at all) do the legal and moral obligations of private-company directors differ from those of directors of publicly held companies?

2. Evaluate the board composition and actions. All things considered, did the board act properly? Did the board members choose the optimal time to terminate Billy Ray Repko?
3. What should the board members do now (March 22, 2016)?
4. What could have prevented or minimized the problems that Arrow faced?

**E-mail Question:**

If the Sarbanes-Oxley law had been passed before the time of this case, do you think the problems faced by the board of Arrow Motorcar Corporation would have occurred? Explain.

**Session 22**

**Topic: Fiduciary Obligations Related to Executive Compensation and Other Governance Issues**

In this class, we will discuss the fiduciary obligations related to executive compensation. Our guest for the day (I hope) will be Michael Ziering, the now-retired Chairman/CEO of Diagnostic Products Corporation (DPC). Michael has both a legal background and experience with issues such as those described in the case assigned for the day. I have asked Michael also to give you some perspective on the Foreign Corrupt Practices Act and the difficulties DPC faced in complying with that Act after we discuss the Golden Parachutes case.

**Reading:** deK, Chapters 8 and 9

**Prepare for Class:** Case—Golden Parachutes?

**Assignment Questions:**

1. If the proposed severance agreement is implemented, who benefits and who loses?
2. Should the compensation committee approve the severance agreement as is? Should some of the elements of the agreement be modified? Or should DTI not have a severance agreement?
3. Suppose that you, as Dennis Feingold, object strongly to at least some of the elements of the severance agreement but that the other two members of the DTI compensation recommend adopting the agreement as it is written. Would it be worthwhile for you to voice your objections forcefully and, perhaps, to take the issue to the full board of directors? Or would you consider it adequate just to cast a negative vote when the issue comes up in the compensation committee?

**E-mail Question:**

Are there any ethical issues in this case? If so, what? What makes them ethical issues?

## **Session 23**

### **Topic: “New” practices: Enterprise Risk Management**

Our focus in this session is on enterprise risk management, a newly developing tool aimed at helping companies address all the various kinds of risks they might face.

**Reading:** deK, Chapter 6, particularly pp. 107–108, and Appendix C

**Prepare for Class:** Case—Entropic Communications, Inc.

#### **Assignment Questions:**

1. Why did Entropic implement a formal enterprise risk management (ERM) process?
2. Do you think the company realized the benefits of ERM as envisioned by COSO? Why or why not?
3. What changes would you suggest for making the ERM process at Entropic more effective?

#### **E-mail Question:**

ERM is currently one of the hot topics in management. Virtually every company is looking at the technique and deciding whether and how to use it. Do you think the ERM technique is a fad that will soon disappear or an improvement that will provide enduring benefits to a broad range of companies?

## **Session 24**

### **Topic: “New” practices: Going “Beyond Budgeting”?**

In this session, we will examine the “planning and budgeting system” of a company that has gone “Beyond Budgeting.” This approach is still relatively rare. Is it superior to what most companies do and, hence, an innovation that will spread? Or is it a fad that will soon die out?

**Reading:** Go to the Beyond Budgeting Institute website ([www.bbrt.org](http://www.bbrt.org)). Read some of the key materials in the sections titled “About” and “Resources.”

**Prepare for Class:** Case—Statoil

#### **Assignment Questions:**

1. Statoil managers claim that their company no longer prepares a budget. What do they mean by that claim?
2. Why did Statoil decide to abandon budgeting?
3. Describe the new processes that Statoil implemented to replace the budget. What are its strengths and weaknesses?

4. Is the Statoil “Ambition-to-Action” system just a routine implementation of the Beyond Budgeting approach, or does it include some additional features or fail to uphold some of the Beyond Budgeting principles?
5. The “Beyond Budgeting” approach is still relatively rare outside Europe. Why? Is there something about non-European cultures that limits its applicability, or are other companies just slow to catch on to an innovation that has started in Europe?

**E-mail Question:**

Instead of placing sometimes exclusive emphasis on the achievement of budget targets, as they claim to have done, and possibly still do, in banks, for example, should firms go “beyond budgeting”?

**Note:** I expect Bjarte Bogsnes, a key character in the Statoil case, to join us in class today. You can see Bjarte’s new book called *Implementing Beyond Budgeting* promoted on the [bbri.org](http://bbri.org) website. Bjarte is Chairman of the Beyond Budgeting Institute in Europe and a leading expert on this topic. We will indeed be fortunate to have him with us in class if he can arrange his travel from Norway.

**Session 25**

**Topic: Industry Application: A Sales Incentive System**

In this class, we will discuss the merits and demerits of a proposed new sales incentive system that includes an interesting “truth-inducing” feature.

**Prepare for Class:** Case—Houston Fearless 76, Inc.

**Assignment Questions:**

1. Why are Houston Fearless 76, Inc. (HF76) managers unhappy with the company’s existing sales incentive plan? Are weaknesses in this plan a major cause of the company’s performance problems?
2. Evaluate the new incentive plan being contemplated. What modifications would you make to the proposed new plan, if any? How would you address the unresolved issues?
3. Are there any significant impediments to the successful implementation of the new incentive plan? If so, which?
4. Would you make any changes to the system providing bonuses to sales assistants? If so, what?

**E-mail Question:**

Is extra 5% bonus attached to the “truth-inducing” feature of the proposed new incentive plan large enough to motivate the salespeople to improve the accuracy of their sales forecasts? If not, is this element of performance worth paying out more money?

## **Session 26**

### **Topic: Industry Application: A Billing Scorecard**

In this class, we will discuss an innovative results-control approach to solution of a problem that is usually addressed with development and enforcement of sets of policies and procedures.

**Prepare for Class:** Case—Game Shop, Inc.

#### **Assignment Questions:**

1. Why was GSI's production quality control performance so much better than its billing performance?
2. Evaluate the billing improvement effort and each of the elements of the system that emerged. Comment specifically on the billing scorecard, detention meetings, P-CARs, and any other system elements that you believe are relevant.
  - a. In considering the scorecard, be sure to address the following questions: What are the Scorecard and each of its measures trying to accomplish? Are these the right measures? Does each measure add unique value? Are the measures weighted appropriately in importance? Are the business unit grades generally consistent across measures? Can any of the measures be distorted or gamed?
  - b. Do you believe that David's improvement efforts will close the gap between production and billing performance enough to meet project goals? Explain?
  - c. Do you have any suggestions to improve the billing process? Explain.
3. GSI's ultimate goal is "perfection." Can this system be used to achieve billing perfection as it is designed, or will changes have to be made, or might even a totally different approach be necessary? Explain.
4. The Billing Scorecard is a results-accountability approach to address the problem, chosen because this company's culture is "metrics centric." What are the advantages and disadvantages of using a results-accountability approach? What other alternatives might have been used to solve the problem?

#### **E-mail Question:**

Would you include billing performance among a short list of "critical success factors" for GSI? If so, why has it apparently not received much attention from management up until now? If not, why all the concern now?

## **Session 27**

### **Topic: Industry application: A Hedge fund**

In this class, we will discuss issues related to performance evaluation and incentive compensation in a hedge fund. Our primary focus will be on the role of the hedge fund analysts.

**Prepare for Class:** Case—Raven Capital, LLC

**Assignment Questions:**

1. Assume the role of a Raven portfolio manager who has to allocate a bonus pool to the four analysts working primarily for him. Assume a 20% incentive fee for Raven. Use 30% of the incentive fee as the bonus pool to be allocated to the four analysts whose backgrounds and 2009 portfolio performances are described in Assignment Figures A and B (posted separately on Blackboard).
  - a. How would you allocate bonuses to these four analysts? What alternatives did you consider? Why did you make the choices you did?
  - b. Is there any other information you would like to have had available before making your decisions? If so, which?
  - c. Do you think you should pay out the entire bonus pool this year, or hold some money in a “bonus bank reserve”? Why or why not?
  - d. Should the proportions of the bonuses allocated vary depending on the size of the bonus pool available? Redo the allocations of the bonus pool to these four analysts assuming that because of a high water mark constraint, the incentive fees earned in 2009 were only \$300,000.
2. Evaluate the Raven performance evaluation and incentive compensation system. What changes would you recommend, if any?

**E-mail Question:**

Employee compensation levels in this industry are higher than in most other industries. Is this high compensation justified, or is it evidence of one or more flaws in the corporate governance system? Explain.

**Session 28**

**Topic: Industry Focus: Health Care**

In this class, we will try to apply the knowledge we have gained in the earlier sessions to a challenging setting—control of doctors in a family medical practice.

**Prepare for Class:** Case—Family Care Specialists Medical Group, Inc.

**Assignment Questions:**

1. What purposes are served by the FCS physician compensation system? Must some of the compensation be made performance-dependent?
2. Is the current system an improvement over the QIIP that it replaced? Explain why, listing the major strengths and weaknesses of both plans.
3. Are the incentives provided by the existing system “balanced” or are some forms of initiative rewarded more generously than others? In particular, compare the average reward for seeing additional patients during regular sessions to that for seeing additional patients

during “extra” Saturday sessions. How might the existing system affect FCS physicians’ allocation of effort?

4. What are the major constraints on the design of any physician compensation system for FCS? In particular, how should FCS decide the appropriate reward, if any, for higher performance?
5. What changes to the FCS physician compensation system, if any, would you recommend to Dr. Samaniego?

**E-mail Question:**

Is management of doctors somehow different? In particular, should we expect doctors to respond to performance-dependent incentives like most corporate employees do, or do they have other, perhaps mostly nonpecuniary, motivations?

**Session 29**

**Topic: Management Control in Not-for-Profit Organizations**

In this session, we will discuss some control issues in a setting with which you all have some familiarity—USC.

**Reading:** MV, Chapter 16

**Prepare for Class:** Case—University of Southern California: Responsibility Center Management System

**Assignment Questions:**

1. Using the terminology that we used in this course, what would you call USC’s responsibility centers? Are they revenue centers? Profit centers? Something else?
2. The RCMS seems to be working reasonably well. USC has used it for over 25 years, and seemingly nobody wants to abandon it. What makes it effective?
3. Consider each of the criticisms of RCMS:
  - a. Does it sound plausible that the RCMS could have been causing, or at least contributing to, the problems if, indeed, there were problems?
  - b. Which of the problems have been solved by the RCMS refinements that were implemented over the years? Which remain?
4. What should be done now? Does the RCMS create “perverse incentives”? If so, how? If not, why not?

**E-mail Question:**

Very few colleges and universities use a decentralized responsibility center system like RCMS. If RCMS provides USC with a comparative advantage, why haven’t more universities implemented something like it? Conversely, if RCMS is an inferior system, why has USC used it for so long?



## **Session 30**

### **Topic: Revision**

In this session, we will review the major themes of the course.

Then I will hand out the final exam. It will be a take-home exam that is due in my mailbox, in the lobby of the Accounting building, by 5:00 p.m. on Thursday next week. You are expected to work on the exam individually; collusion will be considered as cheating.

# Model Syllabus 4

## London School of Economics

Department of Accounting

AC411

### Accounting, Strategy and Control

Professor Wim A Van der Stede

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#### Overview

AC411 is focused on the study of the quintessential role of management control in decentralized organizations. Our focus will be on the measurement and evaluation of the performances of organizational entities and their managers. Management accounting at this level of analysis is an integral part of companies' *management control systems*.

In AC411, we discuss what it means to have an organization be *in control*, what alternatives managers have for ensuring good control, and how managers should choose from among various control system alternatives. Then we will focus on each of the elements of *financial control systems*, which provide the dominant form of control in the vast majority of decentralized organizations. These elements include financial target setting, performance measurement and evaluation and the assignment of various forms of organizational rewards, such as bonuses and promotions. The latter part of the course extends these key notions of management control from the *intra-organizational* level to the *inter-organizational* level, highlighting some of the difficulties involved in organizational control of new, fluid, inter-organizational settings and configurations, such as joint-ventures and various types of alliances, often involving global alliance partners. (This part is taught by an expert in this subfield who visits us for this part of the course—**Professor Henri Dekker**.)

This course is intended as an overview for individuals who will make business decisions, evaluate organizational performance or evaluate others (and/or be evaluated) through the use of financial and nonfinancial information. In other words, the module is designed to be useful particularly for those who aspire to be managers, management consultants, or specialists in staff functions such as controllers, auditors, and human resource specialists.

#### Pedagogy

AC411 consists of ten principal topics delivered in two sessions of 1½ hours each (see *Schedule of Topics and Sessions* below). The first session each week typically provides an introduction,

conceptual analysis, and discussion of the key facets of the topic. The second session offers a further discussion and expansion of the issues through case study analysis and real-world applications. Each session is conducted in groups of about 55 students. The case study analyses and discussions permit the exploration of management control issues in a broad range of settings (e.g., large and small firms, manufacturing and service firms, multinational firms, startups, and joint ventures). The case method of instruction, however, requires good advance preparation by the students, and every student should be ready to contribute to the case discussion when called upon. Students should expect to be “cold called” and not count on being able to hide behind classmates who volunteer to participate. I also expect active participation during the noncase sessions or “lecturettes” when I pose questions or solicit input from the students.

## Readings

Merchant K & Van der Stede W, *Management Control Systems: Performance Measurement, Evaluation, and Incentives* 4e, FT: Prentice-Hall, 2017 (referred to as **MCS** in the schedule below).

Some additional materials are distributed separately in a **course pack**.

## Homework

You are *required* to hand in two essays for this module drawn from the list of possible essay questions sprinkled throughout the schedule below,<sup>1</sup> as well as a written group project detailed under Topic 10 below. Because each essay question is related to a case study, you must turn in the essay of your choice *at the beginning* of the session in which the case is discussed. An essay that is handed in after the case has been discussed in class will not be marked; or more generally, any work turned in after it is due will be dismissed.

## Assessment

**AC411** is assessed by a 2-hour written exam in the week prior to the start of Lent Term (in “LT0” as it is called; that is, in early January, date and room to be determined). You will be required to answer 3 out of the 5 questions. For indicative questions, see the AC411 **exam papers from 2008, 2009, 2010, 2011, ~~2012~~, 2013, 2014, 2015, and 2016** (but *not* years prior to that, and *not* 2012, as I did not teach the course in these years). Not all the questions from these years are covered by the materials this year, so please note the pertinent questions as listed below:

- 2008: Questions 1, 2, 3, 4, 5 (not Q6)
- 2009: Questions 1, 2, 3, 4, 5 (not Q6)
- 2010: Questions 1, 2, 4, 5, 6 (not Q3)
- 2011: Questions 1, 3, 4, 5 (not Q2, not Q6)
- 2013: Questions 1, 2, 4, 5 (not Q3, not Q6)
- 2014: Questions 1, 2, 3, 4, 5 (not Q6)
- 2015: Questions 1, 2, 4, 5, 6 (not Q3)
- 2016: All questions, same format

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<sup>1</sup> If you turn in more than the two essays required, we will retain the marks for your two best essays.

Relevant past examination questions for Professor Dekker's teaching in Sessions 7–9 are:

- Questions 4, 5, and 6 in Section A of AC410's 2006 exam paper
- Questions 7 and 8 in Section B of AC410's 2010, 2011, 2012, 2013, and 2014 papers
- Questions 5 and 6 in AC411's 2015 paper
- Questions 4 and 5 in AC411's 2016 paper

Please also note that both the duration of the exam and optionality of questions were different in all of these years *except for 2015 where the current format was first implemented*. For the avoidance of doubt, for the January 2017 exam you will be required to sit a 2-hour written exam where you will be required to answer 3 out of the 5 questions.

**The final mark for AC411 is composed as follows:**

<b>Two essays</b> (during Term) .....	<b>15%</b>
<b>Group project</b> (due in January) .....	<b>15%</b>
<b>Final exam</b> (in "LT0").....	<b>70%</b>

## Schedule of Topics and Sessions

① *Session 1.1* (Prof Van der Stede): **Introduction**

- MCS Chapter 1

*Session 1.2* (Prof Van der Stede): Puente Hills Toyota

Case Question (for advance preparation):

Evaluate the performance measurement and incentive systems used at Puente Hills Toyota. What changes would you recommend, if any?

② *Session 2.1* (Prof. Van der Stede): **The Control Function of Management**

- MCS Chapters 2–6

*Session 2.2* (Prof. Van der Stede): Kooistra Autogroep

Case Questions (for advance preparation):

1. Did Kooistra Autogroep management go too far in decentralizing the organization? Did they not go far enough? Or did they get it just right? Why?
2. Evaluate the budgeting, performance measurement, and incentive systems used at Kooistra Autogroep. What changes would you recommend, if any?

**Possible Essay Question 1** (for written work): [Think about this question in the light of both the Puente Hills Toyota and the Kooistra Autogroep cases]. Are any of the issues related to management control systems as discussed in these two cases or their preferred solutions affected in any way by the fact that the companies and its managers are Dutch or American, rather than, say, French or Chinese?

③ *Session 3.1* (Prof Van der Stede): **Decision Rights and Results Accountability**

- MCS Chapter 7
- Bouwens J & van Lent L (2007), Assessing the Performance of Business Unit Managers. *Journal of Accounting Research*, 45(4), pp. 667–697.

*Session 3.2* (Prof Van der Stede): Kranworth Chair Corporation

Case Questions (for advance preparation):

1. Identify the most important key recurring decisions that must be made effectively for Kranworth Chair Corporation (KCC) to be successful. In KCC's functional organization, who had the authority to make these decisions? Who has the authority to make these decisions in KCC's new divisionalized organization?
2. Did KCC top management go too far in decentralizing the corporation? Did they not go far enough? Or did they get it just right? Why?
3. Evaluate KCC's new performance measurement and incentive system. Assuming that KCC will retain its new divisionalized organization structure, what changes would you recommend, if any? Why?

**Possible Essay Question 2** (for written work): The vast majority of corporations are decentralized to a considerable degree. What kinds of organizations are best run in a largely centralized manner, and why?

④ *Session 4.1* (Prof Van der Stede): **Planning and Budgeting**

- MCS Chapter 8
- Van der Stede, W (2000), The Relationship between Two Consequences of Budget Controls: Budgetary Slack Creation and Managerial Short-term Orientation. *Accounting, Organizations & Society*, 25(6), August, pp. 609–622.

*Session 4.2* (Prof Van der Stede): Las Ferreterías De México, SA de CV

Case Questions (for advance preparation):

1. Evaluate the proposed bonus plan that Mr. Gonzalez is considering.
2. How, if at all, would you modify the proposed plan?

**Possible Essay Question 2** (for written work): Some managers are known for “never having missed a budget target.” Do you believe that is possible? Does such a record suggest that the managers are extremely effective managers; very lucky managers, or devious, manipulative managers? Are such managers to be congratulated (and, possibly or likely, promoted in their organizations) for their budget-achievement record?

⑤ *Session 5.1* (Prof Van der Stede): **Incentive Compensation Systems**

- MCS Chapter 9
- Van der Stede W (2007), The Pitfalls of Pay-for-Performance. *Finance & Management*, 150, Dec, pp. 10–13.

Session 5.2 (Prof Van der Stede): Houston Fearless 76, Inc.

Case Questions (for advance preparation):

1. Why are Houston Fearless 76, Inc. (HF76) managers unhappy with the company's existing sales incentive plan? Are weaknesses in this plan a major cause of the company's performance problems?
2. Evaluate the new incentive plan being contemplated. What modifications would you make to the proposed new plan, if any? How would you address the unresolved issues?
3. Are there any significant impediments to the successful implementation of the new incentive plan? If so, which?
4. Would you make any changes to the system providing bonuses to sales assistants? If so, which?

**Possible Essay Question 3** (for written work): Do you believe that incentive pay is truly effort-inducing; that is, drive employees to perform at their best? Discuss?

⑥ *Session 6.1* (Prof Van der Stede): **Performance Measurement**

- MCS Chapters 10 and 11
- Kaplan, R. & Norton, D. (2005), The Balanced Scorecard: Measures that Drive Performance. *Harvard Business Review*, Jul-Aug, pp. 172–180.
- Ittner, C. & Larcker, D. (2003), Coming up Short on Nonfinancial Performance Measurement. *Harvard Business Review*, Nov, pp. 88–95.

Session 6.2 (Prof Van der Stede): Johansen's—The New Scorecard System

Case Questions (for advance preparation):

1. Why has Johansen's introduced the new scorecard system?
2. What is the company's strategy? What are the key success factors for successfully implementing that strategy? Describe the organizational structure in place at the company.
3. Consider each of the four perspectives of Johansen's new scorecard system. Why are they included? How are they measured?
4. What rating do you advocate awarding Clark? What are the key arguments you use to support that rating?

⑦ *Session 7.1* (Prof Van der Stede): **Performance Evaluations**

- MCS Chapter 12
- Gibbs, M., Merchant, K., Van der Stede, W. & Vargus, M. (2004), Determinants and Effects of Subjectivity in Incentives. *The Accounting Review*, 79(2), pp. 409–436.

Merchant and Van der Stede, *Management Control Systems: Performance Measurement, Evaluation, and Incentives*, 4e, Instructor's Manual

- Gibbs, M., Merchant, K., Van der Stede, W. & Vargus, M. (2009), Performance Measure Properties and Incentive System Design. *Industrial Relations*, 48, pp. 237–264.
- Van der Stede, W. (2009), Designing Effective Reward Systems. *Finance & Management*, 170, Oct, pp. 6–9.

*Session 7.2* (Prof Van der Stede): Catalytic Solutions, Inc.

Case Questions (for advance preparation):

1. Evaluate the composition of the compensation package at Catalytic Solutions, Inc. (CSI).
  - a. What are the advantages and disadvantages of awarding stock options?
  - b. What are the advantages and disadvantages of awarding bonuses?
  - c. Was the relative importance placed on salaries, stock options, and bonus awards reasonable? Why should CSI offer a mix of rewards rather than providing its employees 100% of their compensation based on 100% salary? On 100% annual bonuses?
2. Evaluate the specific features of the annual bonus plan in 2001 and 2002. Comment on:
  - a. the choice of the number of measures used, the specific measures used, and the changes in the plan between years;
  - b. the relative proportions of financial vs. nonfinancial measures;
  - c. the decision to base rewards on company-wide, rather than individual, performance;
  - d. the amount of subjectivity allowed in determining the bonus awards;
  - e. the calibration (target difficulty) of the bonus plans.

**Possible Essay Question 4** (for written work): Fast-forward 10 years. Assume that CSI has been successful. It is now a much larger, public company. It has three operating divisions (investment centers) that focus on different markets. What would you expect the CSI measurement and compensation systems to look like at that time? Why?

⑧ *Session 8.1* (Prof Dekker): **The Emergence and Management of Inter-Organizational Relationships**

- Anderson, S. & Sedatole, K. (2003), Management Accounting for the Extended Enterprise: Performance Management for Strategic Alliances and Networked Partners. In Bhimani A (Ed.), *Management Accounting in the Digital Economy* (Oxford University Press).
- Dekker, H. (2004), Control of Inter-Organizational Relationships: Evidence on Appropriation Concerns and Coordination Requirements. *Accounting, Organizations and Society*, 29(1), pp. 27–49.

*Session 8.2* (Prof Dekker):

Case: *Toyota*, in: Dyer, J. & Nobeoka, K. (2000), Creating and Managing a High-Performance Knowledge-sharing Network: The Toyota Case. *Strategic Management Journal*, 21, pp. 345–367

Case Questions (for advance preparation):

1. What are the main controls used to motivate suppliers to effectively participate in knowledge sharing, and to safeguard firm knowledge from opportunistic use?
2. How effective would formal controls (e.g., monitoring mechanisms) be for these purposes? What could be the consequences of using formal controls for the effectiveness of knowledge exchange and for the relationships with suppliers?
3. How is Toyota able to reap most benefits from the collaborative practices detailed in the case? How can it maintain this situation/position?
4. Shouldn't Toyota be concerned about competitors replicating these practices? What can competitors do to improve competitiveness?

⑨ *Session 9.1* (Prof Dekker): **Contract design for Inter-Organizational Relationships**

- Anderson, S. & Dekker, H. (2015), The Role of Management Controls in Transforming Firm Boundaries and Sustaining Hybrid Organizational Forms. *Foundations and Trends in Accounting*, 8(2), pp. 75–141.
- Ding, R., Dekker, H., & Groot, T. (2013), Risk, Partner Selection and Contractual Control in Inter-Firm Relationships. *Management Accounting Research*, 24, pp. 140–155.

*Session 9.2* (Prof Dekker):

Case: *IBM Microelectronics* in—Shih, W., Pisano, G., & King, A. (2008), Radical Collaboration: IBM Microelectronics Joint Development Alliances. *Harvard Business School* (case 9-608-121).

Case Questions (for advance preparation):

1. How does the shared innovation model work at IBM? Are there any particular aspects in the choice of partners that are important to the success of the model?
2. What are IBM's motivations for the Common Platform Initiative? What are IBM's motivations for the Process Development Alliances (Bulk CMOS and SOI)?
3. What control problems do you foresee in the collaborative initiatives? How might these be controlled? Also discuss under which conditions you think this model of collaborative R&D might work (i.e., which conditions are necessary for success)?

⑩ *Session 10.1* (Prof Dekker): **Management Control in Inter-Organizational Relationships**

- Anderson, S., & Dekker, H. (2015), as listed above.
- Anderson, S., Christ, M., Dekker, H., & Sedatole, K. (2014), The Use of Management Controls to Mitigate Risk in Strategic Alliances: Field and Survey Evidence. *Journal of Management Accounting Research*, 26(1), pp. 1–32.
- Anderson, S., Dekker, H., & Van den Abbeele, A, (in press), Costly Control: An Examination of the Tradeoff between Control Investments and Residual Risk in Interfirm Transactions. *Management Science*.



**Assignment** (Prof Dekker): This is your ***Formative Assignment #2*** due by Wednesday 18 January 2017 at the following e-mail address: h.c.dekker@lse.ac.uk.

Assignment: *The Renault-Nissan Alliance in 2008: Exploiting the Potential of a New Organizational Form* [Stanford Graduate School of Business, SM-166]

This case explains the strategic situation and challenges facing Carlos Ghosn and the Renault-Nissan Alliance in 2008 and beyond. Please discuss the following three (related) case questions:

1. The alliance could be described as a sort of “supra-corporate ecological system.” Discuss how it might exploit to a greater extent the potential of this novel organization form. Include in your discussion a consideration of which constraints, tensions and risks the alliance partners might face, and how could these be dealt with.
2. Taking into consideration the strategic change and global automotive industry dynamics that are reshaping the industry, discuss the challenges and implications of further scaling up the alliance (i.e., the further evolution of the alliance—what Ghosn calls the “fourth stage”).
3. Discuss the importance of developing further the strategic leadership capability of the alliance and the evolving role of Carlos Ghosn as CEO of both Renault and Nissan. In particular reflect on how the global strategic leadership may be developed as an organizational capability, and on the advantages and disadvantages of dual CEO-ship.

Please aim to keep the case discussion limited to a maximum of five pages (font size 11, line spacing 1.5).

*Session 10.2* (Prof Van der Stede): **Revision Session**

# Model Syllabus 5

## Accounting 537—Management Control Systems (Evening)

Marshall School of Business, University of Southern California

<b>Professor</b>	Kenneth A. Merchant
<b>Office</b>	HOH 606
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<b>Class Hours</b>	Tuesdays, 6:30–9:30 p.m.
<b>Classroom</b>	JKP 202
<b>Office Hours</b>	By appointment. Arrange by e-mail. I will do my best to accommodate your schedule.
<b>Honor Code</b>	Students are expected to adhere to, and will be bound by, the University and School policies governing academic integrity.
<b>Text</b>	K. A. Merchant & W. A. Van der Stede (2017), <i>Management Control Systems: Performance Measurement, Evaluation, and Incentives</i> . London: Financial Times/Prentice-Hall, 4th edition.

### Course Objectives

This graduate course is designed to broaden and deepen your conceptual and technical understanding of management control systems (MCS). MCS are considered broadly to include everything that managers do to ensure good performance or, more specifically, to ensure that the company's strategies get implemented effectively. But the emphasis in the course is on *financial controls*, which dominate in importance at managerial levels in all but the smallest organizations. Using financial controls requires managers to make decisions about: (1) responsibility structures (e.g., cost centers, profit centers), (2) performance measures (e.g., market, financial, and/or nonfinancial measures and their combinations), (3) performance evaluations, which take into consideration performance targets or other benchmarks, and (4) rewards (including performance-dependent compensation).

The course is issue-oriented, with current and emerging issues as a major focus. Among the issues we will discuss are control uses of measures such as EVA, EBITDA, and customer satisfaction, dashboards and Balanced Scorecards, the “stress-testing” use of financial plans, the

“Beyond Budgeting” movement, various uses of stock-based compensation, the control implications of the Sarbanes-Oxley Act of 2002, enterprise risk management, and corporate governance.

The course is built around a textbook—Merchant and Van der Stede’s *Management Control Systems*. The text is supplemented with a short monograph (de Kluyver’s *A Primer on Corporate Governance*):

(MV) K. A. Merchant & W. A. Van der Stede (2017), *Management Control Systems* (London: Financial Times/Prentice-Hall), 4th edition.

(deK) C. de Kluyver (2009), *A Primer on Corporate Governance* (New York: Business Expert Press).

Some additional materials also will be distributed on Blackboard.

The focus of most of the classes will be on discussions of cases. The readings are intended to provide background that is useful for informing the case discussions. For each case assignment, I will provide some Discussion Questions. These questions are intended to help frame and focus your reading and consideration of the course materials. In a number of the classes, I will invite a practitioner visitor to class to add expertise and to bring the topics “to life.”

## Grading

Project 1	50 points
Project 2	50 points
Class participation	50 points
Final exam	<u>100 points</u>
<i>Total</i>	<i>250 points</i>

## Projects

The projects will involve group analyses of cases that are supported by data provided on Excel spreadsheets. The first project is a budget “stress testing” exercise. The second involves comparative performance evaluations of a large number of bank branches. Some groups will be asked to present their analyses and conclusions in class.

Students can form their own working groups, but I will help if needed. The optimum (and maximum) group size is four. I will accept groups as small as three. As part of the grading process, I will ask students to grade each of their fellow group members. This is done to try to reduce the “free-rider” effect.

## Class Participation

I assign a material proportion of the grade based on **class participation** for several reasons. First, it improves my grading accuracy. I think I can learn more from hearing you share

your ideas in a long series of classes than I can from reading what you write in a few short exam sessions.

But perhaps more important than that, grading class participation motivates class participation, and having highly interactive class sessions helps the learning process. Active class participation encourages students to be well prepared and thus to become active, rather than passive, learners. Participation provides students with the opportunity to gain from the experiences and talents of everyone in the class. And class participation helps students improve their oral communication skills. This is important because research shows that people in business tend to spend very little time reading and even less time writing reports. A great deal of managers' and other professionals' interactions with others are through oral communication.

Class participation evaluation will be based primarily on the quality of the participation in classroom discussions. To be clear on what I am looking for regarding class participation, and to further aid in your preparation, I have listed below some characteristics of effective class participation:

- (1) Does the class member make points that are especially pertinent to the discussion? Do they increase the understanding of the class or are they simply a regurgitation of the problem or case facts?
- (2) Is there continuity in one's contribution from what has been said previously during class, or are the comments disjointed, isolated, or tangential? The best class contributions are those that reflect not only excellent preparation, but also good listening, interpretive and integrative skills.
- (3) Do the comments reflect a willingness to put forth new, challenging ideas or are they always agreeable and "safe"?
- (4) Is the participant able and willing to interact with others by asking questions, providing supportive comments or challenging **constructively** what has been said?

Participation will be evaluated based on a near-continuous scale, the end points of which can be described as follows:

**Outstanding Contributor:** This person's contributions reflect exceptional preparation, and the ideas offered are always substantive and provide major insights and direction for the class. If this person were not a member of the class, the quality of the discussions would be diminished significantly.

**Unsatisfactory Contributor:** This person may be absent from class or someone who rarely participates in class discussion. Alternatively, this person's contribution in class reflects inadequate preparation and/or understanding. Ideas offered are not substantive and provide few, if any, insights and never a constructive direction for the class. Integrative comments and effective arguments are absent. Class comments are either obvious, isolated from the main discussion, or confusing to the class.

## Final Exam

The final exam will test **individual** (not group) work. The **final exam** will be a take-home exam in lieu of an exam during the final exam period. It will involve a case analysis. No make-up exams will be given (see LSOA policy on incompletes).

## E-Mail Questions

On the bottom of many of the class assignments, you will see that I have included an “e-mail question.” Prior to noon before each of our classes, please send me an e-mail message or private Blackboard posting answering the question(s) for that day’s class. This is not intended to be a time-consuming obligation. Your answers should be brief—**three sentences or less** for each question.

Your answers to the e-mail questions serve multiple purposes. First, they help me to get to know you and how you think. Second, these messages open the communication channels between us. Since you have to send me a message, it is easy to append another thought. In the past some students have used this opportunity to ask a question on another topic or to give me some feedback about the course. I welcome this. Third, your e-mail answers help me orient the class discussion. For example, they help me both to judge the mindset of the class and to find people with unique perspectives. Finally, the questions are functional because they encourage good advance preparation. The regularity with which you input your e-mail question answers on a timely basis and the quality of your answers will form part of your participation grade.

## Schedule of Classes

### Week 1

#### Topic: The Control Function of Management

In this first session, we will go over the syllabus and get to know each other. Then I will provide a general lecture on managers’ control options. Finally, we will discuss some control vignettes and a case.

**Reading:** MV, Chapters 1–4

**Prepare for Class:** Case—Atlanta Home Loan

#### Assignment Questions:

1. Identify the devices (controls) that Al Fiorini used to control his business both before and after he went back to school. Classify each control as a results, action, or personnel or cultural type of control.
2. What went wrong? Did Al use the wrong types of controls? Did he use the right types of controls but fail to design or implement them properly? Or was he just unlucky?
3. What should Al Fiorini do now? Why?

## **Week 2**

### **Topic: Results Controls**

In the first part of the class, we will discuss a control system evaluation case which illustrates the control system used in a field service engineer (FSE) setting. The case is particularly interesting because the company, Diagnostic Products Corporation (DPC), is in the midst of a significant change. Formerly, company managers controlled FSE inputs—they paid FSEs for hours worked. Now they are attempting to measure FSE outputs, or results, and to provide performance-dependent compensation.

In the second part of the class, we will examine and critique the performance measurement and incentive systems in two companies in an industry with which all of you have some familiarity—automobile retailing. The two companies' systems are quite different. Can we say which one is the better design? What might explain the differences?

**Reading:** MV, Chapters 5, 6, and 9

**Prepare for Class:** Cases—Diagnostic Products Corporation (DPC)

Puente Hills Toyota

Kooistra Autogroep

#### **Assignment Questions:**

Diagnostic Products Corporation (DPC)

1. Evaluate the design of the DPC Performance Bonus Program for U.S.-based field service engineers (FSEs) as it currently exists and the way in which the Program is being implemented.
2. What changes would you suggest, if any?

#### **Assignment Questions:**

Puente Hills Toyota and Kooistra Autogroep

1. Compare and contrast the performance measurement and incentive systems used at Puente Hills Toyota and Kooistra Autogroep.
2. When comparing the use of incentives in the two companies, do you believe that incentive pay is truly effort-inducing; that is, does it drive employees to perform at their best? If you believe incentive pay is not, in whole or in part, effective in making employees work harder, then what other potentially useful purposes does variable incentive pay provide for organizations relying on it, if any?
3. What advice would you provide to the managers of these companies?

**E-mail Question:**

As a first approximation, which of the following statements do you believe is most correct, and why:

- I. People are people. They respond approximately equally to many things, including incentive systems.
- II. To work well, a company's incentive systems must be tailored in many ways to fit the specific desires of various employee groups.

**Week 3**

**Note:** The names of the individuals working on the two group projects are due to me by the start of this class. The optimum (and maximum) group size is four. Groups of three are permissible. Please have a representative send me an e-mail message with the names of the individuals in your group.

**Topic: Financial Responsibility Structures and Problems Caused by Interdependence**

The focus of the first part of this session is on one of the main management control system choices—design of the organization's authority and financial responsibility structures. Some of these choices create organizational interdependence—products or services are provided by one organizational entity to another. Interdependence, in turn, often creates cost allocation or transfer pricing problems. In the second part of this session, we will discuss a representative example.

**Reading:** MV, Chapter 7

**Prepare for Class:** Cases—Kranworth Chair Corporation  
Zumwald AG

**Assignment Questions:**

Kranworth Chair Corporation

1. Identify the most important key recurring decisions that must be made effectively for KCC to be successful. In KCC's functional organization, who had the authority to make these decisions? Who has the authority to make these decisions in KCC's new divisionalized organization?
2. Did KCC top management go too far in decentralizing the corporation? Did they not go far enough? Or did they get it just right? Why?
3. Evaluate KCC's new performance measurement and incentive system. Assuming that KCC will retain its new divisionalized organization structure, what changes would you recommend, if any? Why?

4. Assume that the R&D function is to be decentralized (given to the divisions). Would this necessitate changes to KCC's performance measurement and incentive system? If so, which and why? If not, why not?

**Assignment Questions:**

Zumwald AG

1. What sourcing decision for the X73 materials is in the best interest of:
  - a. The Imaging Systems Division?
  - b. The Heidelberg Division?
  - c. The Electronic Components Division?
  - d. Zumwald AG?
2. What should Mr. Fettinger do?

**E-mail Question:**

Is a transfer price just a cost allocation with a profit margin tacked onto it? Explain.

**Week 4**

**Topic: Budgeting or "Beyond Budgeting"**

Planning and budgeting processes are important, and often complex, elements of companies' management control systems. Most firms beyond minimal size, but not all, engage in often extensive planning processes, the annual component of which is called budgeting. The Mainfreight case that we will discuss in the first part of this class, however, illustrates the functioning of a large, successful international logistics company that does *not* engage in an annual budgeting process. The goal in this case is to think about what budgeting is, and what it is not, and how Mainfreight can succeed without having a budget, which is a control system element that most companies think is essential. One of the key points of discussion of this session, therefore, is to consider whether there are valid, effective alternatives to budget-based performance management systems, and if so, whether these really are what they claim to be or just budgeting processes under a different guise?

In the second part, we will examine the "planning and budgeting system" of another company that has gone "Beyond Budgeting." The approach illustrated in Statoil is probably superior to what most companies do and, thus, perhaps an innovation that will spread? Or might it be a fad that will soon die out?

**Reading:** MV, Chapter 8

**Prepare for Class:** Cases—Mainfreight

Statoil



**Assignment Questions:**

Mainfreight

1. At the very least, Mainfreight's management systems are nontraditional.
  - a. What are the key elements of Mainfreight's results control systems?
  - b. Why did Mainfreight managers decide to take a nontraditional approach?
  - c. How does Mainfreight perform the functions typically fulfilled by budgets? Or are some of those functions really not that important?
  - d. Does the Mainfreight system address the limitations of traditional budgets? Does it introduce new limitations?
2. Is Mainfreight a well-controlled organization?
3. Should companies that now use an annual budgeting process try to emulate some or all of the management systems used by Mainfreight? Why or why not?

**Assignment Questions:**

Statoil

1. Statoil managers claim that their company no longer prepares a budget. What do they mean by that claim?
2. Why did Statoil decide to abandon budgeting?
3. Describe the new processes that Statoil implemented to replace the budget. What are its strengths and weaknesses?
4. Is the Statoil "Ambition-to-Action" system just a routine implementation of the Beyond Budgeting approach, or does it include some additional features or fail to uphold some of the Beyond Budgeting principles?
5. The "Beyond Budgeting" approach is still relatively rare outside Europe. Why? Is there something about non-European cultures that limits its applicability, or are other companies just slow to catch on to an innovation that has started in Europe?

**E-mail Question:**

Mainfreight's top executives, three of whom are qualified accountants, maintain that their company does not prepare budgets. Is that contention accurate? How should one determine whether a company prepares a budget or not?

**Week 5**

**Topic: The Planning Role of Budgets: Business Stress Testing (Group Project 1)**

Planning is decision making in advance. Using the financial statement format in a future-looking sense (i.e., budgeting) allows managers to anticipate what might be coming their way in various plausible scenarios.

In this class session, we will consider the work you have done for your first group project. Some of the groups will present their findings. The group presentations will either reinforce each other or, if they are different, we will compare and contrast them.

Case: VisuSon, Inc.

*The assignment is posted on Blackboard.*

## **Week 6**

### **Topic: Summary Financial Performance Measures: Advantages and Limitations**

There are many forms of summary financial performance measures. Are some better than others?

**Reading:** MV, Chapter 10

**Prepare for Class:** Cases—Behavioral Implications of Airline Depreciation Accounting Policy Choices

Berkshire Industries, Inc.

#### **Assignment Questions:**

Behavioral Implications of Airline Depreciation Accounting Policy Choices

Assume that at least some rewards for the management team (and, hence, also other employees) are based on performance measured in terms of accounting income and returns on net assets. Also assume that all of these airlines are growing; that is, they are adding to their fleet of aircraft.

1. What are the behavioral implications of each of the three depreciation-related accounting policy choices:
  - a. depreciation patterns (i.e., straight-line vs. accelerated);
  - b. estimated useful lives; and
  - c. residual values?

Consider, at a minimum, the effects of each of these choices on decisions regarding:

- a. replacements of aircraft in service;
  - b. pricing, assuming that prices are at least somewhat dependent on costs;
  - c. evaluations of routes or lines of business;
  - d. evaluations of managers, assuming that negotiated budgets provide the primary standards of performance.
2. Assume that in a particular U.S. airline company there is a conflict between the benefits of conservatism vs. liberalism in depreciation accounting. That is, for this company conservatism in depreciation accounting is greatly preferred for financial reporting purposes (for whatever reason) but for internal purposes the company would be better off if the policies were more liberal, or vice versa. Would you recommend to the managers of this

company that they adopt a third set of books? That is, should they maintain one set of books for financial accounting purposes, another set for tax purposes, and a third set for the purposes of running the business?

3. If the managers of a particular airline do not want to maintain a third set of books, should they tend to be conservative or liberal in their aircraft depreciation accounting?

**Assignment Questions:**

Berkshire Industries, Inc.

1. Were Berkshire's motivations for a new incentive system reasonable? If so, what were their main options for a new system? Was an economic profit-focused system a reasonable choice?
2. Evaluate the Berkshire Industries' new incentive plan. What changes would you recommend, if any?
3. What, if anything, should Mr. Embleton do about the problems caused by performance shortfalls in the Spirits Division? Explain.

**E-mail Question:**

International Financial Reporting Standards (IFRS) are less prescriptive than current U.S. GAAP, and the interpretive guidance that is provided is more limited. More judgment is needed by managers in firms following IFRS, so this question will become more relevant after U.S. firms shift over to IFRS: Should judgments about financial reporting policies be affected significantly by concerns about the possible effects on behaviors of employees of the firm, or should they be chosen solely based on judgments about what is perceived to provide the best financial reporting disclosures?

**Week 7**

**Topic: Combinations of Measures: KPIs, Dashboards, and Balanced Scorecards**

The focus of this session is on the concurrent use of multiple performance measures. The most popular combination-of-measures system is marketed as "Balanced Scorecard." But some variations are given alternative names, such as dashboards, KPIs and performance prisms.

**Reading:** MV, Chapter 11

**Prepare for Class:** Case—Catalytic Solutions, Inc.

Johansen's—The New Scorecard System

**Assignment Question:**

Catalytic Solutions, Inc.

Evaluate the CSI performance measurement and compensation systems. What changes would you suggest be made, if any? Explain.

**Assignment Questions:**

Johansen's—The New Scorecard System

1. Why has Johansen's introduced the new scorecard system?
2. What is the company's strategy? What are the key success factors for successfully implementing that strategy? Describe the organizational structure in place at the company.
3. Consider each of the four perspectives of Johansen's new scorecard system. Why are they included? How are they measured?
4. What rating do you advocate awarding Clark? What are the key arguments you use to support that rating?

**E-mail Question:**

- What kinds of companies should implement a basket-of-measures approach, such as balanced scorecard, rather than just monitoring and rewarding their general managers' performances based on a single bottom-line summary performance measure?

**Week 8**

**Topic: Performance Evaluations: Adjusting for the Effects of "Uncontrollables"**

In the first part of this class, we will continue our discussion of performance evaluations. How can/should firms deal with the effects of uncontrollable events that often obscure managers' impacts on performance measures?

I will dismiss class early to allow you to start working on the second group project, which is due for presentation in class next week.

**Reading:** MV, Chapter 12

**Prepare for Class:** Case—Olympic Car Wash

Beifang Chuang Ye Vehicle Group

**Assignment Question:**

Olympic Car Wash

How large should the bonus pool be for the Aalst location?

**Assignment Question:**

Beifang Chuang Ye Vehicle Group

To what extent, if at all, should Mr. Zhou provide incentive compensation for his employees when his company is losing money? Why? What factors did you take into consideration in making your judgment?

**E-mail Question:**

Some companies make performance evaluation and bonus adjustments to protect managers from the harmful effects of many uncontrollable factors. Other companies make no such adjustments. Is one of these approaches clearly inferior, or is this just a “management style” choice?

**Week 9**

**Topic: Performance Evaluations (Group Project 2)**

Case: Fine Harvest Restaurant Group

In the first part of this class session, your groups will present the findings of the performance evaluation group project exercise. The assignment and the *Fine Harvest Restaurant Group* database that go with it are posted on Blackboard. In the last part of the class (I hope), an expert class visitor will provide both some reactions to your presentations and some color about this real world consulting assignment.

**Week 10**

**Topic: The Role of Controllers and Control Impacts of the Sarbanes-Oxley Act**

In the first part of this session we will discuss a case that allows us to consider the role of controller/CFO in a more stressful time. In the second part, we will focus on the benefits and costs to corporations of the Sarbanes-Oxley Act of 2002 (SOX).

**Reading:** MV, Chapters 13–15

**Prepare for Class:** Case—Don Russell: Experiences of a Controller/CFO

Pacific Sunwear of California, Inc.

**Assignment Questions:**

Don Russell: Experiences of a Controller/CFO

1. Does Don have the power to force ETI top management to make a correcting accounting entry? If not, what should he do? If so, should he force the entry to be made, and how large should it be?
2. Are earnings management practices such as took place at C&S and ETI smart? Are they ethical?
3. Does Don Russell have an obligation greater than that of other employees to try to ensure that his corporation acts ethically?

**Assignment Questions:**

Pacific Sunwear of California, Inc.

1. Evaluate the process that PacSun went through to comply with SOX, and particularly SOX Section 404. Was that process as effective and efficient as it could have been?

2. Are the “significant deficiencies” that were identified in each of the two years of the audit evidence of control system flaws or largely irrelevant technical violations? Another way to phrase this question might be: Should disclosure of these deficiencies have had a negative effect on PacSun’s stock price?
3. PacSun executives seem convinced that the costs of complying with SOX were greater than the benefits to the company. Why did PacSun not benefit from the compliance process to the same extent as some other companies? Or were their compliance costs too high?

**E-mail Question:**

If the Sarbanes-Oxley law had been passed prior to the time of the events described in the Don Russell case, would it have prevented the problems faced at ETI?

**Week 11**

**Topic: Enterprise Risk Management**

Our focus in the first part of this session is broadly on systems of corporate governance and the roles and obligations of boards of directors. Then we will focus on enterprise risk management, a newly developing tool aimed at helping board members and managers address all the various kinds of risks that the company might face.

**Reading:** deK, Chapters 1, 2, 3, and 6, particularly pp. 107–108, and Appendix C.

**Prepare for Class:** Case—Entropic Communications, Inc.

Andrew G. Scavell, Chief Risk Officer

**Assignment Questions:**

Entropic Communications, Inc.

1. Why did Entropic implement a formal enterprise risk management (ERM) process?
2. Do you think the company realized the benefits of ERM as envisioned by COSO? Why or why not?
3. What changes would you suggest for making the ERM process at Entropic more effective?

**Assignment Questions:**

Andrew G. Scavell, Chief Risk Officer

1. What was the key rationale or impetus for the risk management drive at LP&F?
2. Was Andy the right person to drive this risk management effort? Was ERM eventually being formalized through the right role in LP&F? Which are the critical tensions in this role? Was Andy best placed—either through prior experience and/or through the way the new role was conceived—to deal with these tensions effectively?

3. Describe in a concise, well-structured format the key tenets of the risk management process that Andy had devised. Was this process effective? Accepted by all? Complete? Overall, what are the strengths and weaknesses of the ERM process?
4. Do you reckon the company realized the benefits of ERM as envisioned by Andy and/or the board? Why or why not?
5. What changes, if any, would you suggest for making the ERM process at LP&F more effective?

**E-mail Question:**

ERM is currently one of the hot topics in management. Virtually every company is looking at the technique and deciding whether and how to use it. Do you think the ERM technique is a fad that will soon disappear or an improvement that will provide enduring benefits to a broad range of companies?

**Week 12**

**Topic: Fiduciary Obligations of Board of Directors**

In this class, we will discuss two cases with corporate governance issues.

**Reading:** deK, Chapters 8 and 9

**Prepare for Class:** Cases—Arrow Motorcar Corporation  
Golden Parachutes?

**Assignment Questions:**

Arrow Motorcar Corporation

1. Why did Arrow Motorcar Corporation have a board of directors before it went public? How (if at all) do the legal and moral obligations of private-company directors differ from those of directors of publicly-held companies?
2. Evaluate the board composition and actions. All things considered, did the board act properly? Did the board members choose the optimal time to terminate Billy Ray Repko?
3. What should the board members do now (March 22, 2016)?
4. What could have prevented or minimized the problems that Arrow faced?

**Assignment Questions:**

Golden Parachutes?

1. If the proposed severance agreement is implemented, who benefits and who loses?

2. Should the compensation committee approve the severance agreement as is? Should some of the elements of the agreement be modified? Or should DTI not have a severance agreement?
3. Suppose that you, as Dennis Feingold, object strongly to at least some of the elements of the severance agreement but that the other two members of the DTI compensation recommend adopting the agreement as it is written. Would it be worthwhile for you to voice your objections forcefully and, perhaps, to take the issue to the full board of directors? Or would you consider it adequate just to cast a negative vote when the issue comes up in the compensation committee?

**E-mail Question:**

Identify the ethical issues you see in these cases? What makes them ethical issues?

**Week 13**

**Topic: Industry Applications—A Family Business and a Family Medical Practice**

In this session, we will practice applying knowledge we have gained in earlier sessions. First we will examine a proposal to change a sales incentive program. Then we will consider how to motivate doctors in a family medical practice.

**Prepare for Class:** Case—Houston Fearless 76, Inc.

Family Care Specialists Medical Group, Inc.

**Assignment Questions:**

Houston Fearless 76, Inc.

1. Why are Houston Fearless 76, Inc. (HF76) managers unhappy with the company's existing sales incentive plan? Are weaknesses in this plan a major cause of the company's performance problems?
2. Evaluate the new incentive plan being contemplated. What modifications would you make to the proposed new plan, if any? How would you address the unresolved issues?
3. Are there any significant impediments to the successful implementation of the new incentive plan? If so, which?
4. Would you make any changes to the system providing bonuses to sales assistants? If so, what?

**Assignment Questions:**

Family Care Specialists Medical Group, Inc.

1. What purposes are served by the FCS physician compensation system? Must some of the compensation be made performance-dependent?



2. Is the current system an improvement over the QIIP that it replaced? Explain why, listing the major strengths and weaknesses of both plans.
3. Are the incentives provided by the existing system “balanced” or are some forms of initiative rewarded more generously than others? In particular, compare the average reward for seeing additional patients during regular sessions to that for seeing additional patients during “extra” Saturday sessions. How might the existing system affect FCS physicians’ allocation of effort?
4. What are the major constraints on the design of any physician compensation system for FCS? In particular, how should FCS decide the appropriate reward, if any, for higher performance?
5. What changes to the FCS physician compensation system, if any, would you recommend to Dr. Samaniego?

**E-mail Question:**

Should we expect doctors to respond to performance-based incentives like salespeople do, or do they have mostly non-pecuniary motivations?

**Week 14**

**Topic: Industry Applications: A “Billings Scorecard” and Control of a Not-for-Profit Organization**

In the first part of this class we will discuss an innovative results-control approach to solution of a problem that is usually addressed with development and enforcement of sets of policies and procedures. In the second part, we will discuss some control issues in a setting with which you all have some familiarity—USC.

**Reading:** MV, Chapter 16

**Prepare for Class:** Cases—Game Shop, Inc.

University of Southern California: Responsibility Center Management System

**Assignment Questions:**

Game Shop, Inc.

1. Why was GSI’s production quality control performance so much better than its billing performance?
2. Evaluate the billing improvement effort and each of the elements of the system that emerged. Comment specifically on the billing scorecard, detention meetings, P-CARs, and any other system elements that you believe are relevant.
  - a. In considering the scorecard, be sure to address the following questions: What are the Scorecard and each of its measures trying to accomplish? Are these the right measures? Does each measure add unique value? Are the measures weighted appropriately in

- importance? Are the business unit grades generally consistent across measures? Can any of the measures be distorted or gamed?
- b. Do you believe that David's improvement efforts will close the gap between production and billing performance enough to meet project goals? Explain?
  - c. Do you have any suggestions to improve the billing process? Explain.
3. GSI's ultimate goal is "perfection." Can this system be used to achieve billing perfection as it is designed, or will changes have to be made, or might even a totally different approach be necessary? Explain.
  4. The Billing Scorecard is a results-accountability approach to address the problem, chosen because this company's culture is "metrics centric." What are the advantages and disadvantages of using a results-accountability approach? What other alternatives might have been used to solve the problem?

**Assignment Questions:**

University of Southern California: Responsibility Center Management System

1. Using the terminology that we used in this course, what would you call USC's responsibility centers? Are they revenue centers? Profit centers? Something else?
2. The RCMS seems to be working reasonably well. USC has used it for over 25 years, and seemingly nobody wants to abandon it. What makes it effective?
3. Consider each of the criticisms of RCMS:
  - a. Does it sound plausible that the RCMS could have been causing, or at least contributing to, the problems if, indeed, there were problems?
  - b. Which of the problems have been solved by the RCMS refinements that were implemented over the years? Which remain?
4. What should be done now? Does the RCMS create "perverse incentives"? If so, how? If not, why not?

**E-mail Question:**

Would you include billing performance among a short list of "critical success factors" for GSI? If so, why has it apparently not received much attention from management up until now? If not, why all the concern now?

**Week 15**

**Topic: Industry Applications: A Hedge Fund**

In the first part of this session we will discuss issues related to performance evaluation and incentive compensation in a hedge fund, with our primary focus on the role of the hedge fund analysts.

At the end of the session I will review the major themes of the course, and I will hand out the final exam. It will be a take-home exam that is due in my mailbox, in the lobby of the Accounting building, by 5:00 p.m. on Thursday next week. You are expected to work on the exam individually; collusion will be considered as cheating.

**Prepare for Class:** Case—Raven Capital, LLC

**Assignment Questions:**

1. Assume the role of a Raven portfolio manager who has to allocate a bonus pool to the four analysts working primarily for him. Assume a 20% incentive fee for Raven. Use 30% of the incentive fee as the bonus pool to be allocated to the four analysts whose backgrounds and 2009 portfolio performances are described in Assignment Figures A and B (posted separately on Blackboard).
  - a. How would you allocate bonuses to these four analysts? What alternatives did you consider? Why did you make the choices you did?
  - b. Is there any other information you would like to have had available before making your decisions? If so, which?
  - c. Do you think you should pay out the entire bonus pool this year, or hold some money in a “bonus bank reserve”? Why or why not?
  - d. Should the proportions of the bonuses allocated vary depending on the size of the bonus pool available? Redo the allocations of the bonus pool to these four analysts assuming that because of a high water mark constraint, the incentive fees earned in 2009 were only \$300,000.
2. Evaluate the Raven performance evaluation and incentive compensation system. What changes would you recommend, if any?

**E-mail Question:**

Employee compensation levels in this industry are higher than in most other industries. Is this high compensation justified, or is it evidence of one or more flaws in the corporate governance system? Explain.

# Case Matrix

	1 - Management and Control	2 - Results Controls	3 - Action, Personnel, and Cultural Controls	4 - Control System Tightness	5 - Control System Costs	6 - Designing and Evaluating Management Control Systems	7 - Financial Responsibility Centers	8 - Planning and Budgeting	9 - Incentive Systems	10 - Financial Performance Measures and Their Effects	11 - Remedies to the Myopia Problem	12 - Using Financial Results Controls in the Presence of Uncontrollable Factors	13 - Corporate Governance and Boards of Directors	14 - Controllers and Auditors	15 - Management Control-Related Ethical Issues	16 - Management Control in Not-for-profit Organizations	Integrative case	Database case designed for group project
1. Leo's Four-Plex Theater	✓		✓	✓	✓													
2. Wong's Pharmacy	✓																	
3. Private Fitness, Inc.	✓		✓	✓	✓	✓												
4. Atlanta Home Loan	✓		✓			✓												
5. Office Solutions, Inc.		✓						✓				✓						
6. Puente Hills Toyota		✓			✓	✓		✓		✓		✓					✓	
7. Kooistra Autogroep		✓				✓		✓									✓	
8. Houston Fearless 76, Inc.		✓						✓										
9. Whisky and Associates, Inc.			✓	✓										✓				
10. The Platinum Pointe Land Deal			✓		✓									✓				
11. EyeOn Pharmaceuticals, Inc.			✓															
12. Axeon N.V.			✓															✓
13. Controls at the Bellagio Casino Resort			✓	✓														
14. PCL: A Breakdown in the Enforcement of Management Control	✓	✓	✓	✓		✓												
15. Philip Anderson					✓										✓			
16. Sunshine Fashion: Fraud, Theft, and Misbehavior among Employees	✓		✓		✓	✓												

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Source	1 - Management and Control	2 - Results Controls	3 - Action, Personnel, and Cultural Controls	4 - Control System Tightness	5 - Control System Costs	6 - Designing and Evaluating Management Control Systems	7 - Financial Responsibility Centers	8 - Planning and Budgeting	9 - Incentive Systems	10 - Financial Performance Measures and Their Effects	11 - Remedies to the Myopia Problem	12 - Using Financial Results Controls in the Presence of Uncontrollable Factors	13 - Corporate Governance and Boards of Directors	14 - Controllers and Auditors	15 - Management Control-Related Ethical Issues	16 - Management Control in Not-for-profit Organizations	Integrative case	Database case designed for group project
17. Better Beauty, Inc.	Authors	✓			✓				✓			✓		✓			✓	
18. Fit Food, Inc.	Authors	✓			✓												✓	
19. Atlantis Chemical Industries	Authors				✓						✓							
20. Diagnostic Products Corporation	Authors	✓				✓			✓		✓							
21. Game Shop, Inc.	Authors	✓				✓			✓									
22. Family Care Specialties Medical Group, Inc.	Authors	✓				✓			✓									
23. Kranworth Chair Corporation	Authors	✓							✓			✓						
24. Zumwald AG	Authors					✓												
25. Global Investors, Inc.	Authors					✓												
26. Royal Wessanen NV	Authors	✓							✓			✓						
27. The Stimson Company	Authors		✓						✓			✓						
28. Multiple Versions of the Plan	Authors								✓									
29. Vitesse Semiconductor Corporation	Authors								✓								✓	
30. VisuSon, Inc.: Business Stress Testing	Authors								✓								✓	
31. Harwood Medical Instruments PLC	Authors	✓							✓									
32. Superconductor Technologies, Inc.	Authors	✓							✓		✓							
33. Raven Capital, LLC	Authors	✓							✓			✓						
34. Behavioral Implications of Airline Depreciation Accounting Policy Choices	Authors																	
35. Las Ferreterías de México, S.A. de C.V.	Authors				✓													
36. Industrial Electronics, Inc.	Authors	✓			✓				✓									

Merchant and Van der Stede, *Management Control Systems: Performance Measurement, Evaluation, and Incentives*, 4e, Instructor's Manual

Source	1 - Management and Control	2 - Results Controls	3 - Action, Personnel, and Cultural Controls	4 - Control System Tightness	5 - Control System Costs	6 - Designing and Evaluating Management Control Systems	7 - Financial Responsibility Centers	8 - Planning and Budgeting	9 - Incentive Systems	10 - Financial Performance Measures and Their Effects	11 - Remedies to the Myopia Problem	12 - Using Financial Results Controls in the Presence of Uncontrollable Factors	13 - Corporate Governance and Boards of Directors	14 - Controllers and Auditors	15 - Management Control-Related Ethical Issues	16 - Management Control in Not-for-profit Organizations	Integrative case	Database case designed for group project
37. Haengbok Bancorp		✓								✓								
38. Corbridge Industries, Inc.										✓								
39. King Engineering Group, Inc.		✓						✓		✓								
40. Berkshire Industries PLC		✓						✓		✓								
41. Catalytic Solutions, Inc.		✓				✓				✓								
42. Dortmund-Koppel GmbH		✓								✓								
43. Johansen s: The New Scorecard System		✓								✓								
44. Mainfreight										✓								
45. Statoil								✓		✓								✓
46. Olympic Car Wash												✓						
47. Beifang Chuang Ye Vehicle Group												✓						
48. Hoffman Discount Drugs, Inc.		✓						✓										
49. Howard Building Corporation, Inc.			✓															
50. Bank of the Desert (A) and (B)									✓									✓
51. Fine Harvest Restaurant Group (A) and (B)										✓								✓
52. Arrow Motorcar Corporation													✓					
53. Golden Parachutes?													✓					
54. Pacific Sunwear of California, Inc.			✓											✓				
55. Entropic Communications, Inc.																		
56. Bio/Precise Medical Devices, Inc.																		
57. Don Russell: Experiences of a Controller/CFO					✓													

Merchant and Van der Stede, *Management Control Systems: Performance Measurement, Evaluation, and Incentives*, 4e, Instructor's Manual

	1 - Management and Control	2 - Results Controls	3 - Action, Personnel, and Cultural Controls	4 - Control System Tightness	5 - Control System Costs	6 - Designing and Evaluating Management Control Systems	7 - Financial Responsibility Centers	8 - Planning and Budgeting	9 - Incentive Systems	10 - Financial Performance Measures and Their Effects	11 - Remedies to the Myopia Problem	12 - Using Financial Results Controls in the Presence of Uncontrollable Factors	13 - Corporate Governance and Boards of Directors	14 - Controllers and Auditors	15 - Management Control-Related Ethical Issues	16 - Management Control in Not-for-profit Organizations		
58. <i>Desktop Solutions, Inc. (A): Audit of the St. Louis Branch and (B): Audit of Operations Group Systems</i>	Authors																	
59. <i>Andrew G. Scavell, Chief Risk Officer</i>	Authors					✓		✓					✓	✓				
60. <i>Two Budget Targets</i>	Authors				✓			✓							✓			
61. <i>Conservative Accounting in the General Products Division</i>	Authors				✓					✓					✓			
62. <i>Education Food Services at Central Maine State University</i>	Authors				✓			✓							✓			
63. <i>The "Sales Acceleration Program"</i>	Authors				✓					✓					✓			
64. <i>The Expiring Software License</i>	Authors				✓					✓					✓			
65. <i>Wired, PLC</i>	Authors									✓					✓			
66. <i>Mean Screens USA, Inc.</i>	Authors									✓					✓			
67. <i>Lernout &amp; Hauspie Speech Products</i>	Authors									✓					✓			
68. <i>Ethics@Cisco</i>	Authors		✓												✓			
69. <i>SCI Ontario: Achieving, Measuring, and Communicating Strategic Success</i>	Ivey															✓		
70. <i>University of Southern California: Responsibility Center Management System</i>	Authors				✓											✓		✓

*Database case designed for group project*

*Integrative case*

## **The Case Method of Instruction: Suggestions for Students**

All teaching methods are aimed at producing learning. Learning occurs when someone's skills, knowledge, or beliefs change, more than temporarily, because of an encountered situation.

Most students are intimately familiar with the lecture method of instruction because it is the primary, if not the sole, formal teaching method to which they have been exposed. Lecturing imparts knowledge through a deductive reasoning process, which begins with a formal statement of a conceptual structure or theory and then illustrates the structure with examples and problems. Lectures, supported with readings, visual aids, exercises, and problems sets, are the most efficient way to begin to transmit knowledge about specific facts, rules, and structured techniques.

In management-related education, however, the value of lecturing has some sharp limitations because facts, rules, and techniques are a relatively minor part of what budding managers and functional specialists must learn. Most business professionals operate in complex, changing environments, and they often must make judgments and take actions without having complete sets of reliable information. They cannot perform their jobs well merely by referring to neat lists of rules and theories and compilations of facts. They need to develop job skills, philosophies, and approaches. It's not as much what managers know that determines their success or failure; it is how they think and act. To enhance thinking skills, most people believe that more active teaching styles, in particular the case method of instruction, are superior to instructor-focused, lecture-type methods.

### **The Case Method**

The case method of teaching stimulates learning through the analysis of actual events. The primary distinguishing feature of the case method is that students play an active, rather than a passive, role in the learning process and, particularly, the classroom. The method develops a

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*Professor Kenneth A. Merchant prepared this note to facilitate students' adaptation to case courses. Professors Sam Hariharan and S. Mark Young provided useful suggestions.*

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subject inductively by actively involving students in discussions of large numbers of cases in planned combinations.

Cases, which provide descriptions of actual (or sometimes hypothetical) administrative situations, are obviously one key ingredient for case learning. Business cases come in multiple forms. Most of the cases that are taught inductively<sup>1</sup> are either diagnostic or decision cases (or combinations of the two forms). **Diagnostic** (or evaluative) cases provide descriptions of successes or failures managers have had so that students can develop their skills of identifying causal links between systemic features and outcomes. Some of these cases describing managerial successes can be called “anatomy” cases; those describing failures can be viewed as “pathology” cases. Often a course is organized through the use of a series of diagnostic cases that help students understand when a particular management choice or style is effective. The other common case form—**decision** cases—allows students to step figuratively into the decision makers’ shoes. The basic question these cases pose is: What should be done? Like in the real world, however, the decision-relevant information provided in these cases is incomplete and partially unreliable, so a solution cannot be reached solely through structured analysis techniques. Many cases **combine** the diagnostic and decision purposes. They require students both to analyze the situation and prepare an action plan.

Another key ingredient for case learning is a “Socratic” teaching style that gives students the primary responsibility for analyzing the case and providing recommendations. A case instructor’s role is to facilitate the discussion, not to put the “right answer” on the board (even when a right answer exists).

## Advantages and Disadvantages of the Case Method

Management educators are increasingly recognizing that more active methods of learning must necessarily be a part of a broad gauge approach to management education and development. For example, in 1990, in their first position statement, the Accounting Education Change Commission, a group endeavoring to improve accounting education, stated:

Students must be active participants in the learning process, not passive recipients of information. They should identify and solve unstructured problems that require use of multiple information sources.

Most accounting instructors have interpreted this statement as a call for greater use of the case method of instruction.<sup>2</sup>

Proponents believe that the case method has some powerful advantages over less active methods of learning, including:

1. **Development of effective thinking processes.** The calls for greater use of the case method are based on the belief that management is a skill that is more than the assimilation and

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<sup>1</sup> Some instructors use the “case” label to describe examples or application exercises they use to illustrate points made in a textbook or lecture (for example, a depreciation calculation using actual company numbers or a practical application of regression analysis). Most case method instructors would not call these cases, and they would not call the use of these cases “the case method” because the teaching and reasoning process is deductive, not inductive.

<sup>2</sup> If this call is correct for teaching accounting, one of the most highly structured management functions, then surely it is correct for most, if not all, other management fields.

application of a set of structured techniques. Business people must make decisions regarding problems and opportunities arising out of new situations in a continuously changing environment. Case instructors believe that education should provide the facility to act in the presence of new experience. They believe, "It is not what you have been trained to know that is important; it is how you have been trained to think and act."

2. **Customized learning.** Cases require students to construct their own individual interpretations of the realities to which they have been exposed and their own workable approaches. Thus, case learning builds on the students' own individual backgrounds and perspectives. This is one reason the case method is particularly valuable for adult learning and why the case method has a dominant market share in executive education, where students have considerable experience on which they can build.
3. **Knowledge retention.** Since case learning is experience-based and anchored in reality, it tends to be internalized and to be retained longer than that obtained through lectures and readings.
4. **Development of skills of managing time and coping with ambiguity.** Cases help students learn to manage time and tolerate ambiguity. Like managers, they have to look at situations that involve multidimensional issues and, with tight time constraints, formulate credible action plans without complete information.
5. **Development of communication skills.** Case classes help develop the important skills of oral communication and persuasion, listening, and relating to others.
6. **Broadening of perspective.** Students are exposed to a variety of real business situations, in different functions and industries. This exposure gives the students confidence in interviewing and in early job experiences.
7. **Higher student motivation level.** Many students find cases more interesting to prepare than abstract readings, and they find the case discussion classes more interesting to attend than lecture/question classes. Thus learning is more fun, and the class's energy level is higher.

The case method is not a panacea, however. It has a number of weaknesses and limitations, including these:

1. The case method is **inefficient** for some forms of learning (as discussed above). Some students' reaction to early case discussions is: "Why don't you just tell us what we need to know, and we'll put it in our notes and learn it." In any field, it is true that some knowledge, such as facts and rules, can be neatly codified, so no course is or should be taught exclusively by the case method. Even instructors who are devoted to the case method lecture through some material or assign relevant readings when it is desirable to impart knowledge about specific theories or techniques.
2. The case method can be **frustrating** at times because what is learned is often personal, intimate and private. The instructor usually cannot tell students the "right" answers; they have to struggle with their own insights and attempt to make sense of the experiences with which they are presented.

3. The case method usually **requires greater effort** (for both students and instructors). Only the individual will know when they are “done.” Students usually find themselves changing their minds when exposed to others’ opinions (but that is a sign that learning is occurring).
4. The case method is **threatening** to some students. They find it difficult to think and participate in class, preferring instead to retain their old classroom habit of passive note taking.

However, because of the advantages listed above, the case method is widely used in schools of business, and its use is growing.

## Suggestions for Student Preparation and Participation

Students have two primary duties in a case class: preparation and participation. To some extent, the style of case preparation is individualistic because the case problems are at most only semi-structured, and problem definition and evaluation skills can vary significantly across individuals. Nonetheless, here are some case preparation suggestions that many students find useful:

1. In preparing a case of more than a couple of pages, students should read the first few paragraphs, and then quickly scan the rest of the case (including the exhibits). This overview reading gives a feel for what the case is about and what types of analyses will be possible. The assignment questions also provide a guide to the major issues that will be discussed in class.
2. Then students should read the entire case carefully, underlining the material that is potentially most useful to the key issues or problems at hand. To improve understanding, some students find it helpful to translate text into visually-oriented diagrams, particularly where processes or procedures are described.
3. If assignment questions are given, students should try to answer them. The questions may ask for analyses, solutions, and/or action plans or may require finding or defining the problem. Students usually have to go back through the case to find the data needed to support their work. However, often the information provided in the case is incomplete, and the students, just like the professionals they are training to be, will need to make assumptions and inferences to fill the gaps. Students should try to recognize the assumptions they are making because that recognition may help them understand why other students reached different conclusions. In many cases, differences in assumptions are revealed during the class. Clarifying the assumptions before class starts helps in understanding the class discussion.

Sometimes, however, instructors do not provide assignment questions. This is because they are placing extra emphasis on the development of problem finding, definition, and formulation skills.

4. In the first three steps, students’ best results will come if they have worked by themselves. The next step is to for them to discuss the case with other students. These discussions will lead, almost invariably, to a broader perspective than that which any student could achieve individually. It may also uncover errors and will often lead to an improved set of assumptions, or at least a better understanding of the assumptions made.

With rare exceptions, the entire time spent preparing even a long, complicated case should not exceed three hours. Some diligent students may work much longer on a case, but this is rarely necessary, and it is often harmful. Spending excessive time on a case often causes the students to lose sight of the “big picture” (to “get lost in the trees and lose sight of the forest”). Further, these students are depriving themselves of the opportunity to develop their skills for rapid analysis and synthesis, skills that are critical in most fast-moving management jobs.

The classroom is a place for students to articulate a “point of view,” which includes analyses, conclusions, and recommendations, and to defend it. Good class participation involves a willingness both to share and defend ideas and to listen to what others are saying with an eye to expanding or challenging them. Interchange and constructive controversy lead to much of the learning in a case class. In addition to speeding the learning of specific course concepts, good class participation also enhances the development of skills of communicating, listening, thinking quickly (“on your feet”), and responding to questions under pressure.

It is easy for students to become so preoccupied with their analyses and thoughts that their mind becomes closed to the thoughts of other participants in the discussion. Just as in business, it is important in class to be open-minded and to be willing to shift positions. The measure of individual progress in any particular class discussion is not based so much on a student's own after-class assessment as to whether their ideas were “right.” Instead, it is more useful for each of them to ask: “How much did I take away from the class that I didn't know when I entered?”

## Instructor Roles

The primary role of case instructors is to create an atmosphere conducive to learning. They direct the flow of discussion and record and organize the group's discussion as it emerges. They may also take a more interventionist role in the classroom by, for example, refocusing the discussion on a major issue that has not yet been well discussed, pointing out some of the more subtle issues, encouraging recognition of assumptions underlying a student's analysis, or playing devil's advocate when no other participant seems so inclined.

Sometimes the instructor will choose to summarize the case discussion, or even give a “lecturette” on materials related to the case. When this happens, the conceptual learning that can be so dull in a lecture classroom comes to life, as it is now informed by experience.

Students should expect their instructors to:

1. Know the case facts;
2. Come prepared with a teaching plan and a set of leading questions;
3. Listen to student comments;
4. Encourage all students to participate;
5. Exercise some control of the discussion. This will ensure coverage of the learning objectives for the class (or module) and balance the needs to bring out strong opposing viewpoints while giving every student the chance to become involved in the discussion;

6. Promote professional conduct, which includes, for example, the elimination of noisy side conversations and the disrespectful treatment of students whose participation efforts are earnest and sincere.

They should generally **not** expect their instructor to:

1. Be the focus of discussion. Instructor comments will generally be brief, nonjudgmental, nondirective, and often in the form of questions designed to keep the exchange of ideas flowing. Visual aids will rarely be used in the middle of a discussion because they tend to focus the discussion only on the content of the visual aid and omit other factors that may be as important or interesting.
2. Present definitive opinions or answers (unless only one answer is correct and the class was unable to derive that answer). The problem with revealing instructor comments is that students will usually focus on the instructor's solution/opinion and intellectually abandon their own prior analyses and opinions which may be equally or even more correct given their individual perspectives and assumptions.

## Conclusion

As students become familiar with the case method, they see that the learning depends much more on interchanges between students (and sometimes the instructor) than it does upon individual study or subsequent enlightenment from the instructor. Preparation of a case, by itself, may not provide students with much learning, but it is a prerequisite for effective learning in the classroom.

Some students adjust instantly to the case method. They find the cases exciting to read and the case-oriented classes more stimulating than other, more traditional, lecture-style classes. Others adjust more slowly. They read cases and wonder what they are supposed to do with them, or they find the prospect of participating in class terrifying. Those who find themselves in this second group should keep trying. With enough effort, all students are able to enjoy the intellectual rewards that accrue from effective use of the case method.

## Leo's Four-Plex Theater

### Teaching Note

#### *Purpose of Case*

This case is intended as an in-class, “warm-up” case. It is particularly useful on the first day of class where students cannot be made to prepare a longer case prior to class. The case motivates the students (1) to think about the meaning of good control; (2) to consider a number of different forms of controls; (3) to think about the design vs. the implementation of the various forms of controls; and (4) to consider costs in their recommendations.

#### *Questions*

1. Where is the theater's control system lacking? Are the controls themselves weak or incomplete, or are the theater's problems caused primarily because of lack of discipline in using the existing controls?
2. What control improvements would you suggest for Leo's Four-Plex?

#### *Analysis*

I recommend starting the discussion by asking students to list the controls discussed in the case and the purpose of each. That will lead to the preparation of the chart shown in Exhibit TN-1. Then the discussion can move into the analysis of the problems and possible solutions:

1. *The cashier's collect less cash than the value of the tickets sold (or missing).* The common solution is to make the cashier pay for the shortage, or at least have shortages comprise a significant portion of the employees' performance evaluation.
2. Some refreshment stand sales seem to be lost because the attendants do not collect cash from the customers (perhaps their friends). There are several possibilities here. One is better

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Leo's Four-Plex Theater case.*

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direct supervision. Another is separation of duties between the person who rings up the sale and the person who delivers the refreshments to the customer. (The delivery would not be made unless the customer had a receipt.) A third is to hire more attendants from a different town because they would be less likely to know, and thus to collude, with the customers.

3. *Tickets of the wrong color or wrong date are found in the stub boxes.* The ticket-takers must be reminded of the importance of looking at the colors and dates, and they must be held accountable for implementing the control properly.
4. *The manager is giving away too many passes, including some for unacceptable purposes.* The pass policy must be clarified, and the manager must be warned not to abuse the privilege. If the manager cannot be trusted, then he should probably not be the manager. The owner could get involved in approving the issuance of passes, but this is probably more costly than beneficial.
5. The ticket collectors are apparently admitting some friends who had not bought tickets. Supervision, or even better undercover surveillance, is probably the best solution. If ticket collectors are caught, they should be dealt with harshly to discourage others from engaging in the practice.

### Exhibit TN-1

#### Leo's Four-Plex Theater

#### Controls Used at the Theater and Their Purposes

<b>Controls</b>	<b>Purpose</b>
<b>Color-coded and dated tickets</b>	Ensure that the individual (4) theaters will not be oversold for any given showing.
<b>Serial numbered tickets plus cash count</b>	Allow reconciliation between tickets sold and cash collected.
<b>Turnstile</b>	Controlled access to theater. Allow for ticket collection.
<b>Locked stub box</b>	Allow for reconciliation between tickets collected and attendance counts.

## Wong's Pharmacy

### **Purpose of Case**

This case was designed to contrast with the Leo's Four-Plex Theater case. Like the theater case, it is intended as an in-class, "warm-up" case on the first day of class where students cannot be made to prepare a longer case prior to class. This case illustrates a strategic control (rather than a management control) problem.

### **Questions**

1. What are Thomas Wong's options?
2. Would you characterize the Wong Pharmacy problems as *control* problems?

### **Analysis**

Start by asking students what the problem is. Here it is a small pharmacy that apparently cannot compete with a larger competitor. There is no evidence of behavioral problems at the store level.

Then ask what Thomas Wong's options are. He can:

- Close the store or sell out;
- Move to a different location;
- Try to automate to cut costs (unlikely); or
- Try to find a survivable niche (e.g., different mix of products, superior service).

Finally, ask students if this is a control problem. Yes it is, but it is a *strategic control* problem, not a management control problem. These terms and the distinctions between them are discussed in Chapter 1 of the text.

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## Private Fitness, Inc.

### Teaching Note

#### *Purpose of Case*

This case describes a real-control problem faced by a small fitness-training business. A trusted employee was both stealing cash and, by not recording all sales, diverting some revenues to herself. Students find the setting interesting and easily understandable, but discussion of this simple setting helps students understand the range of control alternatives that firms can use. This is an important first step in designing a control system.

The case illustrates a common problem faced in many small businesses—lack of overlapping controls, or in this case what auditors call “separation of duties.” In addressing the problem described here, students can consider a broad range of control alternatives and their advantages and disadvantages.

#### *Suggested Assignment Questions*

This case was also used successfully as part of a final exam. The questions used were as follows, with the grading weighting used shown in parentheses. These questions might also be used to motivate student preparation for a class discussion of this case.

1. Describe a solution to Rosemary Worth’s control problem that emphasizes:
  - a. Results controls (20%)
  - b. Action controls (20%)
  - c. Personnel/cultural controls (20%)
2. What should Rosemary do? (40%)

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*Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Private Fitness, Inc. case.*

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(You can choose one of the solutions described in your answer to Question 1, or you can combine particular elements of each of those solutions, if appropriate.) Explain why your recommendation is the best solution.

## **Discussion**

Students must first recognize that there are two problems to be solved—the theft of cash and the unrecorded revenue. There are a lot of control options:

- 1. Action controls**—For example, hire a supervisor, camera, locked cash box, use of receipts and reconciliations with cash in the drawer/cash register.
- 2. Results controls**—This is a tough question. Students must recognize that providing Kate a bonus of, say, 10% of revenues or profits does little to reduce her motivation to pocket 100% of the revenue through theft of cash or direct pocketing of revenues. Revenue-based bonus systems could be effective motivators if Rosemary is sure that every client is recognized on the system, but by themselves they won't ensure that every client is recognized.

There are some more creative and better possibilities. For example, hold Kate accountable for the accuracy of the cash reconciliations, which is a result. Or set instructors up as “little entrepreneurs.” Let them keep **all** the revenue, but charge them a fixed fee for access to the facility.

- 3. Personnel/cultural controls**—stricter hiring criteria (e.g., background checks), building a strong “family” culture, group rewards (which encourage mutual monitoring).

The answer to the question “What should Rosemary do?” requires consideration of the benefits (control effectiveness) and costs in this specific setting. Some alternatives, such as a camera, might be effective in tracking usage of the facility, but it is an expensive solution. A wide range of answers is possible here. Students should see that there is not just one solution to this problem.

The case also raises the question as to what Rosemary should do with Kate. Some students get emotionally involved in considering this issue. The answer to this question should be part of the control-system-design discussion.

## **Pedagogy**

This is a short case. It can be used in class even if students have not prepared the case in advance. Most students can probably read the case in 10 minutes, and the answers to the questions can develop in the ensuing class discussion. With or without advanced preparation, the discussion can easily consume 45–60 minutes of class.

## Atlanta Home Loan

### Teaching Note

#### *Purpose of Case*

This case was written as an example of an extreme control failure. It can be used in a class focused on management control, entrepreneurship, or management of small businesses.

Al Fiorini, the manager of a small, but reasonably successful, mortgage lending company in Atlanta hired managers to run his business while he went back to school, for his executive MBA, in California. He did his best to monitor the company's operations while 2,500 miles away. But the managers not only stole from Al, they also stole his entire business! The case forces students to analyze the problems Al faced, to identify the controls that he had in place, and to suggest things he might have done to ensure that these problems would not have occurred.

#### *Suggested Assignment Questions*

1. Identify the devices (controls) that Al Fiorini used to control his business both before and after he went back to school. Classify each control as a results, action, or personnel/cultural type of control.
2. What went wrong? Did Al use the wrong types of controls? Did he use the right types of controls but fail to design or implement them properly? Or was he just unlucky?
3. What should Al do now? Why?

#### *Case Analysis*

These are among the questions that the instructor can use to stimulate the in-class discussion:

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*This note was prepared by Professors Kenneth A. Merchant and Wim A. Van der Stede for the sole purpose of aiding classroom instructors in the use of the Atlanta Home Loan case. It provides analyses and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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**1. How would you describe the Atlanta Home Loan (AHL) control system at the time Al Fiorini left for California?**

Al used each of the major control types, as is shown in Table TN-1 below.

**Table TN-1**  
**Types of controls used by Al Fiorini**

Results controls	Action controls	Personnel/cultural controls
Pay for performance: —loan officers —Joe's 50/50 profit sharing —Wilbur's 100% share, less a fee —telemarketers' bonus per lead produced (\$10 per lead)	Withhold authority to write checks	Personal judgments about people
	Monitoring of behaviors. Examples shown below.	Background checks
	Monitoring of emotional states by talking to employees on the phone	Trust
	Centralization of major decisions	
Performance evaluations, which could affect promotions and job retention. Bases for performance evaluations shown below.		

Examples of Al's monitoring of behaviors:

- Joe's attendance.
- He had all office mail forwarded to him in California.
- He monitored the status of loan applications submitted to lenders electronically.
- He knew what loans were approved and could calculate the amount of revenue due the company.
- He was monitoring the overhead in the office and was making sure it was in line with production. He used industry rules-of-thumb, such as one processor for every four loan officers. At one point Al sent a message to Wilbur telling him that the processor-to-loan officer ratio was too high. Wilbur countered with "Don't tell me how to run a business." At that point, Al was sure that he had a problem.

(Al did not have an electronic link to the processors' files, but he was trying to establish one.)

Examples of metrics that Al used to evaluate performance:

- Telemarketer standard measure of productivity = minimum of one lead per hour.
- Loan officers:

- Lead-to-loan application ratio. The range was 5–20%, depending on the experience of the loan officer.
- Number of credit reports requested.
- Loans funded. Each processor should be up to funding 20 loans per month (one per work day), plus open two new files per day.
- Fallout ratio (processed loan applications that do not result in a closed loan). The industry standard was 30%. AHL was doing better than this.

In the end, Al also used the ultimate control-problem “avoidance” approach—he shut the company down!

**2. What caused the company’s problems? Were they failures in the company’s strategy or control system, or both?**

Obviously this company suffered major problems. Al Fiorini lost money, and it appears he has lost his entire business. It is useful to clarify for the students that the failures were not caused by a flawed strategy. When Al Fiorini was running the company, the company was profitable, and it had significant growth potential. Thus, it is safe to conclude that the problems that arose were control problems.

**3. Is it possible that Al Fiorini’s control system was good but that he was just unlucky?**

This can happen, as control systems are never perfect. But just being unlucky does not account for most of the problems here.

**4. What did Al do wrong?**

With hindsight, it is clear that Al made a number of mistakes:

- a. He trusted people who should not have been trusted. He did not know his people well enough before he left for California. (Note, loan officers are not licensed in Georgia as they are in many other states, including California.) Could he have done better background checks? Would it have helped if he had started earlier to find a manager or partner to run AHL in his absence? But can personnel controls, by themselves, ever be completely reliable? Could Al have moved major portions of the loan process with him to California?
- b. He trusted the banks to fulfill their responsibilities. Bank of America (BoFA) should not have allowed Wilbur to release the stop payments on the checks. Citizens Bank & Trust (CBT) should not have allowed Wilbur to open a new corporate bank account.
- c. The results control arrangements were too easy to evade. Joe apparently quickly discovered that if he did not pass his loan applications through the company, he could earn 100% of the fee, rather than 50%. Al had no control over Joe’s loan application pipeline. He discovered the problems with Joe, but he might also have been having similar, undiscovered problems with the loan officers (i.e., diverting loan applications to other companies).

But how do you control this? Encourage whistle blowing, from someone like Leticia? Hire a company controller/auditor or another level of supervision, perhaps with two signatures required on almost anything? (The company is probably not large enough for this.) Better legal contracts?

Wilbur was clearly dishonest, and he eventually colluded with Leticia. Al relied on legal controls, which were evaded.

- d. The set of action controls was incomplete. Al should have gotten legal assistance earlier, instead of doing some things himself, probably starting with the partnership agreement. Perhaps Al needed a more elaborate set of policies and procedures, such as:
  - i. Don't take files home.
  - ii. Work at the office every day.
  - iii. Document your work.

But how can these action controls be enforced?

- e. When Al first became aware of the problems, he probably should have returned to Atlanta to straighten them out. But that would have been costly; it would have forced him to drop out of the MBA program.

**5. Were Wilbur and Leticia crooks, or were they basically good people who were tempted to go bad by a weak control system?**

In defense of Wilbur and Leticia, there was no evidence of prior problems. Leticia, in particular, had been loyal to Al. Maybe she was corrupted by Wilbur. But what eventually unfolded was an elaborate, clearly dishonest scheme that must have taken some planning. Therefore, one must probably conclude that Wilbur and Leticia were not totally honest people.

Can managers design control systems to protect themselves against dishonest people? Yes, it can be done, but it is hard to do when the person in charge is dishonest and the owner is 2,500 miles away.

**6. What should Al do now?**

Al must address two questions: (1) Should he fight for the business or just give it up? (2) Should he attempt to punish the crooks or just walk away? If a vote is taken, these questions will split the class.

The company is not worth much now, and the lawsuits are expensive to pursue. But it is tough to walk away from a business that had promise. Further, it is natural to have a revenge motive, to punish the crooks through criminal and/or civil cases. Al suffered major losses. He lost his AHL business, which he valued at \$600,000. He was unable to maintain his mortgage payments, so he lost his home in Georgia.

In reality, Al did fight back.

- He withdrew the license issued by the Georgia Department of Banking and Finance to limit the company's potential legal problems.
- He reported the crimes to the Atlanta police and the FBI, but no law enforcement agency ever showed much interest in pursuing the case. They seemingly considered it too small a case to bother with.
- He reported the bank failures to the banking regulators.

But Al never returned to run Atlanta Home Loan. There was not much left of the business. He estimated that he could reclaim about \$15,000–20,000 worth of equipment, and a

phone system worth about \$10,000. But the business pipeline would have to be rebuilt, and not much company goodwill remained, if any.

Al has started a new mortgage lending business in California, and it has gotten off to a successful start. He generates many of his leads through the website [www.lowerrate.com](http://www.lowerrate.com).

### ***Pedagogy***

This case is quite easy to teach. The case itself is not difficult to read and understand, and most students find the situation inherently interesting. Thus, student preparation is generally good, and it is easy to get a good discussion going. With a typical MBA class, the optimum time for discussion of the case is probably around 45 minutes. In a longer class, then, instructors should be prepared also to give a mini-lecture or to discuss something else. We have used this case in the first class of a management control course, so an introduction to the course and the general topic of control fits nicely with this case.



## University of Southern California

Marshall School of Business

Leventhal School of Accounting

A215-03 TN

### Office Solutions, Inc.

#### Teaching Note

##### *Purpose of Case*

The focus of the Office Solutions case is the design of an incentive system for a sales force in a firm operating in the office supplies distribution industry. The CEO was unhappy with the company's current plan, which was primarily commission-based. He thought that kind of system was appropriate for just a few of his sales representatives who brought in new business, those whom he called "hunters." However, most of his reps were just servicing existing clients. He proposed a change in the company's incentive plan, providing different incentives for the two types of reps. However, he encountered resistance to the proposed change.

##### *Suggested Assignment Questions*

1. Evaluate the new approach for compensating the sales representatives at Office Solutions. In your critique, consider, at a minimum:
  - a. The recognition of the two different types of representatives
  - b. The performance measures
  - c. The performance standards
  - d. The forms, mixes, and amounts of compensation
  - e. Why some of the representatives are resistant to the change

What improvements would you suggest?

2. Would Office Solutions be better off if all of its sales representatives were good at "hunting"? If so, how should the company move in that direction?

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*Professors Kenneth A. Merchant prepared this teaching note for the sole purpose of aiding classroom instructors in the use of the Office Solutions case study (A215-03).*

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3. Should Office Solutions managers be monitoring the behaviors of the individuals in their sales force, or can they rely on the incentive system to motivate good behaviors?

## **Case Analysis**

### **Critical Success Factors**

Office Solutions competes with some industry giants (notably Staples and Office Depot), but it has found its niche and has been successful. It is useful to start the case discussion with an identification as to what the company has to do well in order to continue to be successful. Here is a short list of CSFs:

- Stick to its niche. It cannot compete head-to-head with the industry giants.
- Superior customer service, which requires attention to detail.
- Growth. Companies need growth to give employees opportunities to succeed. The most important driver of growth is finding new customers.

### **Description of the System**

It is important for students to have a clear understanding of the current incentive system and its components. This will provide a framework to analyze the proposed changes to the system and to suggest improvements.

**Performance measures:** The most important measure by far is gross profit generated by sales reps customers. This measure is tracked and discussed monthly. It is used to calculate commission and bonus. Other measures used are revenue generated by sales reps' customers for three smaller product categories (used to calculate a small portion of the bonus). In addition, numbers of sales leads and the progression of those leads is tracked in the VFSS system and are used to manage activity.

**Goals and the goal setting process:** Goals are based on a target growth rate, and goals are set through a top-down process. However, managers spend time securing buy-in and commitment to the goals. The annual gross profit goal is broken down by month and by product category for tracking and to help sales personnel understand how it can realistically be achieved.

**Performance evaluation:** Because sales personnel are on a commission system, in a sense they are evaluated against their GP goal every pay period. They are more formally evaluated against their GP and VFSS goals on a monthly basis during sales meetings. Perhaps the most important evaluation is the annual evaluation, which is used to determine annual bonuses.

**Financial compensation:** Under the current systems, all employees earn 25% of the GP generated by their accounts as commission. Almost all of their compensation (more than 95%) is derived from this commission.

Sales personnel can earn another 0.4–0.8% of GP in the form of an annual bonus if they make their GP goal. The range is a step function that increases as the goal is exceeded, capping out at 0.8% of GP if the goal is exceeded by 20% or more.

Sales personnel can earn an additional 0.15% of GP for each of the three minor product categories, if they make their revenue goal for the category. This compensation also comes in the form of an annual bonus.

**Other rewards or consequences:** Students should be able to identify several controls other than compensation:

- Up front discussion and verbal agreement to goals
- Monthly meetings and monthly progress checks against goals
- Monthly discussion of progress against measures in VFSS (mentioned in particular as useful in correcting behavior before it materializes into low sales)
- Annual performance reviews
- Top performers recognized at annual sales meetings

Students may also note the absence of negative consequences for not making goals, aside from how it affects compensation. For example, there is no mention of employees being fired or demoted if they consistently fail to meet goals.

It is clear to Bob Mairena, and should be clear to students, that the current system is not effective. Bob has aggressive growth goals for Office Solutions. The current system is not completely aligned with those goals. Sales personnel do receive individual growth goals that are aligned with company growth goals, and they are evaluated against those goals during monthly meetings and performance reviews. However, a very small percentage of their financial compensation is dependent upon their achieving those goals. Sales personnel do not need to grow the business or even achieve their goals to earn the majority of their pay; they only need to continue to generate a steady gross profit. They can do that through some combination of retention, penetration and acquisition, but most focus on retention, presumably because it is easiest. A few focus on penetration and acquisition when it becomes necessary to replace lost customers/business. A few are true “hunters” who are motivated to grow the business, their own reputation, and their own compensation. But the current system does not adequately incentivize the sales force to aggressively pursue all three tactics to optimize growth. Even though the entire sales force is given growth targets, those targets are not strongly enforced and there is an unstated acceptance, reinforced by the compensation structure, that many sales personnel are only expected to manage existing accounts.

***Assignment Question 1:*** Evaluation of proposal for change

The new proposal is to divide the sales force into two groups, account managers and sales representatives. Sales employees who bring in new business will be considered sales reps. Sales employees who bring in little to no new business will be considered account managers. Sales reps will remain under the current system, with the only proposed change being an increase in compensation. The mechanics of that increase is not defined. For account managers, the most significant change is in the area of compensation. There are no changes proposed to measures, goals and goal setting, or nonfinancial controls. However, financial compensation will change dramatically. Under the proposed system, 70% of an account manager’s salary will be a fixed base salary, not dependent on achieving any goals. The remaining 30% of their salary will be variable, in the form of an annual bonus, dependent upon achieving annual gross profit goals as outlined in the current system.

The sales force is probably resistant to the change because their compensation will be significantly lower if they don't make their goals and earn their bonus. Bob wants to provide account managers with a more stable salary, but hopefully students will recognize that if the bonus makes up 30% of the salary, it is actually much less stable.

There are several other elements of the financial accountability control system for account managers that are not aligned with their new objective, retaining current customers and/or current gross profit. The class can discuss any of a number of potential improvements:

**Measures:** Students might suggest that since the sales force has limited influence on pricing and no influence on cost, sales volume might be a more appropriate measure than GP since that is what sales force has direct control over. However, GP is what company is interested in. Rewarding the sales force on volume alone would leave the company vulnerable to profit risk. Students may also suggest additional measures such as customer satisfaction or percentage of customers retained, that directly align with the new objectives for account managers.

**Goals:** The focus of discussion should be whether it is still appropriate to give account managers goals based on the same growth targets. Account managers will no longer be expected to acquire new accounts, yet there is no discussion in the case of lowering their goals. Additionally, the industry is shrinking, powerful new competitors are entering the category putting pressure on prices, account managers will presumably not be involved in winning new enterprise business, which is a key driver of growth. Students could make the argument that simply maintaining gross profit under these conditions is a goal more aligned with the newly defined responsibilities of account managers.

**Evaluation:** The only change to the evaluation process is timing. Under a commission structure, there is evaluation and accountability every pay period. Now, only the financial accountability is the annual bonus. Students could discuss the benefits of awarding bonuses every quarter instead of annually.

**Compensation:** This is where most of the discussion will probably take place. Students can discuss whether bonuses should be such a large percentage of an account manager's pay and discuss alternatives. For example, if Bob's objective is to provide account managers with a lower, more stable income, students may recommend 100% or close to 100% base salary, set at an amount lower than their current salary, but still high enough to attract new employees and entice existing employees to switch models. Alternatively, students may suggest keeping account managers on commission, but lowering the commission amount to 22% GP and eliminating the bonus. Others may suggest keeping the proposed structure but decreasing GP goal required to receive a bonus.

During this discussion, it would be instructive to challenge students to consider possible negative consequences for suggested improvements. For example, if students suggest lowering the bonus percentage and making the majority of salary a base salary, ask them what would happen under that system if an account manager lost half of their accounts.

**Other rewards/consequences:** Under the proposed system, the financial consequences for not making goals are so severe (will lose 30% of salary) that additional negative consequences may not be necessary. However, if students suggest lower goals and/or changing the compensation structure, than they should also consider additional negative consequences, such as firing employees who fail to maintain GP for some period of time.

Students should recognize that the challenge for Office Solutions is to develop a cohesive structure using all the elements of the control system that drives the desired behavior, in this case, retaining customers and current levels of gross profit.

### ***Suggestions for Improvement***

There are no plans to change the control and compensation system for sales reps so all the issues identified with the system remain; it still does not incentivize the sales force to optimize growth. There is still a discrepancy between the growth objectives and the lack of reward for growth (or consequence for lack of growth). The only difference is that now the only employees under the system will be those who have been identified as hunters. However, students should recognize that in addition to relying on the personal motivations and personalities of employees, there are opportunities to improve the financial control system for sales reps.

**Measures:** Students may suggest using GP generated from **new** business as a measure to evaluate sales reps (this measure is actually tracked by Office Solutions, although it is not currently used to determine compensation).

**Goals:** Students should recognize this as a key element of the control system that should be reevaluated for sales reps. Since the plan is to increase their compensation because they are bringing in new business, their GP goal should reflect their new job expectations. Office Solutions should consider making the goals more aggressive for sales reps and less aggressive for account managers.

**Compensation:** The bonuses for sales reps are so small that they are inconsequential. Along with more aggressive goals should come the potential to earn a much higher bonus. Since sales reps are expected to acquire new business, it is reasonable that they should expect higher rewards and a higher level of risk. Bob wants to increase their overall compensation so perhaps the bonus is the most effective way to do that.

**Other rewards/consequences:** Students should consider whether there should be consequences if sales reps consistently fail to acquire new business and explore alternatives. Perhaps a reason current employees want to stay on as sales reps even if they don't bring in new business, is that there is no downside. There are no consequences in the current system for failure. Students could argue that increasing the bonus goal and payment could act as both a positive and negative consequence. Students could also suggest adding other consequences such as the potential to be terminated or to be transitioned back to an account manager.

**Assignment Question 2:** Should everyone in the sales force be a "hunter"?

This question will generate heated discussion. Good arguments can be made in either direction.

One useful avenue for the discussion is in understanding the value creation potential of the three roles of the sales force:

Sales role	Type of Product	
	Office supplies	Other product categories
Retention of existing customers		
Penetration of existing customers		
Acquisition of new customers		

In which box in this table does the sales force create the most value for Office Solutions? Probably the lower right box. New customers provide the greatest potential for growth. They provide an additional revenue annuity for the company if they can be retained, and most can be retained. Margins in product categories other than office supplies are generally much higher than those in office supplies. Thus, hunting, particularly for customers who will buy a varied mix of products, is the most valuable thing that the sales reps can do. The company needs incentives slanted toward successful hunting to offset the sales reps natural tendencies to just live off their existing customers' purchases.

Some students will argue that all sales people should be required to grow the business if that is an important company goal, which it is. Bob certainly could design a control system that requires all sales personnel to aggressively pursue new business. He could fire employees who are underperforming and/or design a system that is so unprofitable for nonhunters that they quit.

However, students should recognize the risks inherent to that approach. First, it would completely change the culture at Office Solutions, which has a history of a positive work environment and long-tenured employees. Employee turnover could translate into loss of business in an industry still very dependent on customer relationships. Students should also recognize that not all reps are good at hunting, and managing existing accounts effectively is also vital to the success of the company. Recognizing the importance of both management and growth, recognizing and appropriately rewarding different skill sets, clearly stating job responsibilities, and developing distinct financial accountability control systems aligned to those responsibilities is a very good solution. Office Solutions is on the right track here.

Another complication: Bob Mairena realized that most of his older sales representatives, those over the age of 50, were not good at generating new accounts. Is this problem fixable, maybe through the compensation system, or should the company somehow find a way to employ only young reps? This question gets back to the culture of the company. Does the company want to push out the older reps as they lose energy and motivation? Some companies operate that way. If Office Solutions grows, some of the older reps could be promoted to manager levels. That would probably be the ideal solution, but the company cannot grow fast enough to create enough management jobs for all of them.

**Assignment Question 3:** Control other than incentives

Students should recognize that the sales force at Office Solutions is somewhat actively managed. Students can identify several controls that are not related to compensation. These include monthly and annual meetings at which goals and performance are discussed. These meetings enhance communication within the company and inevitably apply some social pressure for performance. In addition, the VFSS system enables the monitoring of some specific sales activities. Once Office Solutions has implemented the new compensation structure, will

they continue to need these other forms of control? Obviously, the more robust the compensation structure, the less necessary it will be to manage employee behavior with other controls.

It is theoretically possible that compensation alone could drive the desired behaviors. However, the performance measures are not perfect, and incentives often have some unintended consequences (such as gaming). Therefore, it is risky to rely solely on compensation. It certainly would not be advisable to eliminate other controls while a new compensation structure is being tested, although less active management could be a source of cost savings in the future.

### ***Pedagogy***

This teaching note has been written with the following pedagogy in mind; that is, clarifying facts about the company, its strategy, and both the old and the new incentive systems is important in getting the class started. Then, it is relatively easy to have the students discuss the rationale for change, the desirable sales force behaviors, the evaluation of the new system, and suggestions for improvement.

## Puente Hills Toyota

### Teaching Note

#### *Purpose of Case*

This case can be used to motivate discussions of a number of topics, including financial responsibility centers, performance measurement, transfer pricing, and incentives. The setting is an automobile dealership, a business about which all students have some interest and understanding. Moreover, the setting is real, so students can benefit from secondary learning about the industry and business.

Because the incentives provided in this company, and the U.S. automobile dealership sector in general, are quite substantive, a significant portion of the case discussion can be usefully devoted to examining and critiquing this company's performance measurement and incentive systems. However, Puente Hills Toyota has some features that, individually and in combination, make it different from most other companies described in cases that focus on incentive systems. This company is privately held; it makes use of some nonfinancial performance measures; it provides incentives to personnel well below the management level; and its managers are well aware that people are "playing games" with some of the measures.

The Puente Hills Toyota case can also be used in conjunction with the Kooistra Autogroep case study, which is also included in this textbook. Kooistra Autogroep and Puente Hills Toyota both are automobile retailers with highly similar organization and industry characteristics. However, that is where the similarities end. Kooistra Autogroep is based in the Netherlands where incentive pay is much less prevalent. Even though there is some evidence that even in the Netherlands companies begin to increasingly provide incentive pay, its advent is nonetheless controversial and not yet well accepted. Therefore, comparing and contrasting both cases (in one class or, alternatively, two separate classes) can lead to useful discussions about cross-cultural differences in the provision of incentives and in perceptions about the effectiveness of incentives.

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Puente Hills Toyota case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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### **Suggested Assignment Questions**

1. Evaluate the performance measurement and incentive systems used at Puente Hills Toyota. What changes would you recommend, if any?
2. At Puente Hills Toyota, most employees' variable incentive pay increases linearly with performance, however, performance is defined; that is, the higher the performance, the larger the bonuses that are paid. In most large companies, however, particularly at managerial levels, no bonuses are paid until a minimum level of performance, such as a budget goal, is exceeded. What are the advantages and disadvantages of using a reward/performance function like Puente Hill Toyota's?
3. (When used in conjunction with Kooistra Autogroep.) When comparing the use of incentives in the Puente Hills Toyota and Kooistra Autogroep cases, do you believe that incentive pay is truly effort-inducing; that is, drive employees to perform at their best? If you believe incentive pay is not, in whole or part, effective in making employees work harder, then what other potentially useful purposes does variable incentive pay provide for organizations relying on it, if any?

### **Case Analysis**

#### **Responsibility Centers**

The case illustrates clearly that financial responsibility centers exist in great variety. While textbooks describe the possible generic responsibility centers as cost centers, revenue centers, profit centers, and investment centers, this case shows some of the variance that can exist within these generic categories. The general sales manager is held accountable for net profit. Obviously, the dealership also keeps track of balance sheet items, but the dealership general manager's incentives do not seem to consider them. So is the general manager an investment center manager?

Similarly, the departments are profit centers, but not all costs are allocated to them. They are more like "gross profit centers." The salespeople are held accountable for gross profit on the deals they initiate, so each salesperson is also a "little profit center." The service advisors are paid on commission, so each advisor is a revenue center. The service technicians, though, are paid for work accomplished.

It is useful to discuss why some seemingly uncontrollable indirect costs are allocated to departments (see Exhibit 3). These allocations are mandated by Toyota, so that they can compare dealership departments on a common basis that treats each department more or less as a stand-alone business. Allocating the costs also gives the department managers information as to what services are being provided for them and it gives them some power to complain if the size of the allocations becomes too high.

This issue can lead into a discussion of the differences between authority and accountability. Managers are generally held accountable for results in areas where they have authority. However, the general sales manager's bonuses are based on performance measured in terms of profit after overhead allocations (line 59 in Exhibit 3). This is an example of a situation where this manager is held accountable for areas over which he has less than full authority. Conversely, the service manager's bonuses are based on the department's gross profit performance, which is before allocations.



## Transfer Pricing

Transfer pricing of service jobs done for internal customers (particularly the Used Car department) is done at market prices. The alternative would be to give the internal customer a discount, or perhaps even to transfer at cost. What would happen under that alternative? It would shift profits from Service to Used Car. It would also provide little incentive for Service to do internal work. Puente Hills Toyota transfers at market prices because they want to measure each department as a stand-alone business and they want to have the Used Car department get as much priority in the Service area as any other customer.

## Performance Measurement

The measurement focus in this business is on profit measures. Do profit measures provide a good indication of value creation in the car retailing business? The answer here is probably yes. This is primarily a short-term business. Dealerships are not making many investments that involve large lags between time of investment and payoff (such as R&D), and they are not creating many intangible assets. The one exception is customer goodwill, so it is not surprising that Toyota mandates that considerable effort also be devoted to the measurement of customer satisfaction (CSI).

It is apparent in the case, however, that some of the measures can be gamed. Puente Hills Toyota managers worry about the gaming in the service area, and they seem to have adequate controls over these behaviors. The CSI measure is also gamed. But here the managers seem to “condone” the gaming because it makes the dealership look better to Toyota. Does the dealership need an un-gamed CSI measure for its own management purposes? How will they get accurate information about customer service problems if and when they exist?

## Incentive Plans

Useful class time can also be devoted to a discussion of the structure of the incentive plans. Depending on the focus of the class and the class time available, the instructor can have the students complete an incentive plan matrix. On a whiteboard, list any or all of the key incentive plan elements. With adequate time, instructors can address the following:

- Eligibility (i.e., Who is included in the plan?)
- Form of payment
- Frequency of payment
- Measure(s) and their importance weighting
- Performance standards
- Shape of reward/performance function
- Size of reward (expected, maximum)
- Funding (e.g., Is there a company bonus pool constraint?)
- Uniformity (Are people in the same role treated the same?)

In an array of columns, list the roles for which the instructor wants to clarify the incentive system. In this case, these might include the general manager, general sales manager, service manager, salespeople, service advisors, or service technicians.

Among other things, this analysis will show that:

- The payments are all in cash.
- The payments are timely (monthly).
- The bonuses are paid by formula; there is no bonus pool constraint.
- There are no performance standards except in the service technician area where standards are set by Toyota. Internally set budgets are used to calibrate the payoff function, but goal-setting does not seem important in this business.
- The service manager reward/performance function is kinked upward to encourage beating the budget.
- The rewards are quite lucrative.

The **first assignment question** asks students for an evaluation of the performance measurement and incentive system, which requires them to identify good and bad points about it. In addition to the points raised above, students might mention the following:

- (-) There are no deferred compensation elements that might provide retention and tax benefits.
- (-) This is an incentive system that would require the company to pay sizable bonuses even if the company is losing money.
- (-) There is no bonus for teamwork. How much teamwork is necessary? The case mentions one area that could be improved—service referrals to sales.
- (?) Is the company paying too much? Answering this question would require knowledge of industry benchmarking. Some of these data are provided in the case Appendices. Puente Hills Toyota's practices seem in line with other dealerships.
- (?) The bonuses are all formula-based. Would it be useful to allow some subjectivity in case unforeseen events unfold or to reward otherwise hard-to-measure aspects of inherently multi-task jobs?

Generally, however, this measurement and incentive system probably must be considered as effective. Much of this system is dictated by Toyota, and this is an industry and company that has refined its systems over the years. Moreover, within the Toyota family, Puente Hills Toyota is a top performer.

The **second assignment question** asks students to evaluate the features of linear incentive pay increases with performance, as opposed to incentive schemes with a floor where no bonuses are paid until a minimum level ("hurdle") of performance, such as a budget target, is exceeded. "Kinks" in the function that relates incentives to performance (such as a floor (but also a

cap) on performance) create temptations for “gameplaying.”<sup>1</sup> Therefore, compared to kinked or *hurdle*-type incentive schemes, linear or *commission*-type incentive schemes remove these temptations. A potential disadvantage of linear incentive schemes, however, is that they also remove the motivational effects of performance targets. In other words, the company pays bonuses from the first dollar of profits earned (or sales booked) even though overall performance during the period may be poor or mediocre at best (i.e., profits or revenues fail to meet target).

Whether the benefits of removing gaming outweigh the loss of motivation due to removing targets depends on the situation. Employees can be strongly motivated by linear incentives schemes in situations where efforts, results, and incentives are tightly linked, as is likely for sales jobs (where the efforts of a salesperson can be directly linked with the sale) or production jobs (where the efforts of a shopfloor worker can be directly linked with the quantity and quality of output). In these situations, therefore, *commissions* (as they are typically called in a sales setting) or *piece rates* (as they are typically called in a production setting), strongly motivate employees to work hard to sell/produce *every* unit, whether the first or the last, regardless of where, or if, a target is set. In summary, given the nature of the sales environment in automobile retailers, Puente Hills probably can be said to reap the benefits of linear incentives through reducing the scope for gaming while still providing strong motivation to perform at any point in time during the performance period.

We address the **third assignment question** in the Teaching Note for the Kooistra Autogroep case study.

## ***Pedagogy***

As with most case classes, instructors must make a decision as to how structured to make the discussion. However, we recommend following roughly the same structure as presented in this teaching note to allow sufficient discussion time spent on all critical elements of any financial results control system, including responsibility centers (and transfer pricing), performance measurement, and incentives. To serve as an integration case, which this case provides an opportunity for, some structure is required as otherwise students tend to focus too quickly on the incentive system that undoubtedly tends to capture most of their attention when reading the case.

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<sup>1</sup> For a more detailed discussion, as well as examples of the various “games” that managers play under kinked incentive schemes, see M. Jensen, “Corporate budgeting is broken—let’s fix it,” *Harvard Business Review* (November 2001), pp. 95–101.

## Kooistra Autogroep

### Teaching Note

#### *Purpose of Case*

The Kooistra Autogroep case describes a company that has expanded significantly from a small owner-run automobile retailer to a top-20 player in the Dutch car dealership market. To handle the growth, management is making an important transition from a primarily centralized organization to one that is becoming increasingly decentralized. This transition allows the case to be used to motivate discussions of a number of substantive issues, including the effects of an organization's growth and competitive environment on its organization structure and management control system design, advantages and disadvantages of decentralization, and design of control systems in decentralized organizations. Specifically, the case focuses on the design and implementation of budgeting, performance measurement, and incentive systems associated with changes in organizational design, in general, and the decentralization of organizational decision authority, in particular.

The case also provides some details about Kooistra Autogroep's early experiences with the new organizational structure and management control system design, thereby providing opportunities for students to suggest possible improvements, or even to consider abandoning the current pay-for-performance system, as some in the case suggest.

The setting is an automobile dealership, a business about which all students have some interest and understanding. Moreover, the case has some unique features. This company is relatively small (despite its recent growth), privately held, makes use of some nonfinancial performance measures, and provides incentives below the management level. Moreover, Kooistra Autogroep is based in the Netherlands where incentive pay is much less prevalent. Even though there is some evidence that even in the Netherlands companies are beginning to provide incentive pay, its advent is nonetheless controversial and not yet well accepted. This can lead to useful discussions about cross-cultural differences in the provision and effectiveness of incentives.

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The Kooistra Autogroep case can also be used in conjunction with the Puente Hills Toyota case study, also included in this textbook. Kooistra Autogroep and Puente Hills Toyota both are automobile retailers with highly similar organization and industry characteristics. However, that is where the similarities end. The incentive pay provided in Puente Hills Toyota, and the U.S. automobile dealership sector in general, is on average much larger than in Kooistra Autogroep or in the Dutch automobile dealership sector. This can lead to a discussion as to whether incentives are effective in driving performance, and if (not) so, why (not).

### **Suggested Assignment Questions**

1. Did Kooistra Autogroep management go too far in decentralizing the organization? Did they not go far enough? Or did they get it just right? Why?
2. Evaluate the budgeting, performance measurement, and incentive systems used at Kooistra Autogroep. What changes would you recommend, if any?
3. (When used in conjunction with Puente Hills Toyota.) When comparing the use of incentives in the Puente Hills Toyota and Kooistra Autogroep cases, do you believe that incentive pay is truly effort-inducing; that is, drive employees to perform at their best? If you believe incentive pay is not, in whole or part, effective in making employees work harder, then what other potentially useful purposes does variable incentive pay provide for organizations relying on it, if any?

### **Case Analysis**

Kooistra Autogroep was a family-owned automobile retailing company founded in 1953. Over the years, Kooistra grew from a small company that sold and serviced cars of only one or two brands from a single location to a top-20 player in the Dutch car dealership market. In early 2007, it owned and operated 13 dealership locations selling 10 brands of automobiles and employed approximately 325 people. Kooistra Autogroep grew primarily through acquisition of other small, owner-run dealerships in the southern part of the Netherlands. Economies of scale had become increasingly important due to economic and competitive pressures that continued to erode profit margins.

Given the growth and complexity of the business, the CEO (who is also part-owner of the company) had to consider delegating more operational autonomy to other managers, particularly dealership managers. With that, he also introduced a budgeting system, a performance reporting system that included both financial and nonfinancial information, and a pay-for-performance system for the company's dealership and department managers.

### **Decentralization**

To address *Suggested Assignment Question 1*, instructors can ask the students to list the advantages and disadvantages of decentralization.

The advantages of decentralization include:

- Freeing up top management time, allowing top management to focus on the most important decisions;

- Enhancing the ability for growth by developing the management team;
- Allowing quicker, more responsive decision-making;
- Reducing the distance between the decision maker and local information by giving authority to the managers who have the most detailed knowledge of their areas;
- Providing clearer responsibility and associated accountability;
- Making managers more cost conscious while being responsive to customer needs and market developments (local competition);
- Increasing motivation and commitment of subordinate managers who are now allowed “to run their own show.”

The disadvantages include:

- *Is top management willing to give up authority?*

The answer seems yes, as “Tom thought that the dealership managers should have substantial authority for the critical decisions in their business, including the hiring, firing, and supervising of their dealership personnel; advertising investments; sales promotions in their local markets; and price reductions that might be needed to move excess inventory or to meet the competition.” With the former owner, Tom Kooistra’s father, this would have been an issue, but Tom seems to embrace decentralization.

- *Are the dealership managers “salesmen” who lack the experience to be “managers”?*

Potentially an issue, although the car dealership business is mostly about making sales. There is no production, no R&D, and intangibles tend to be sales-oriented, such as through maintaining good customer service and providing employee training.

- *Is there a potential loss of economies of scale in key functions?*

Not likely. One could argue for economies in advertising, but advertising is brand-specific and sales promotions are geared to local markets. Kooistra Autogroep also maintained economies of scale in the service and body shop areas as well as in key corporate overhead departments.

- *Can some tough cost allocation problems be settled, such as for corporate overhead support functions?*

Currently not an issue as the dealership’s key performance metric, net profit, was defined as revenues minus “controllable expenses” and, thus, most corporate overhead allocations were “below the line” on which the managers focused. However, top management had the intent to improve its methods of allocating shared service costs to obtain more inclusive net profit numbers and, thus, to place more accountability at lower organizational levels. With that, some tough allocation problems obviously will have to be settled.

- *Will the dealership managers become too entity-focused and lose sight of the company's interests?*

Any change in organizational structure needs time to become fully operational. It is important to watch for signals suggesting control failures. These can occur in essentially two ways: poor *intra*-divisional performance (a well-designed performance measurement system should prevent that—discussed further in this teaching note) or failures to increase firm profits through *inter*-divisional cooperation (the risk is that dealership managers are myopically focused on their own entity results and fail to exploit synergies maximizing overall firm profit). While the latter failure—loss of synergies—is a potential risk, the scope for synergies across dealerships within this company is limited, however. Moreover, any business that potentially affects multiple dealerships is still handled at corporate, such as fleet sales and sales to rental car companies.

- *Is this too complex with unnecessary coordination issues?*

This mainly depends on whether or not good control systems are in place (see below).

Overall, the evaluation of the decentralization at Kooistra Autogroep should be quite favorable. The disadvantages/risks seem limited whereas the advantages/benefits of being able to manage the larger company while being responsive to economic and competitive pressures seem substantial.

That said, it is important to emphasize that decentralization gives rise to a fundamental control issue: How to make sure that employees (especially those who have authority to make important decisions) act in the best interest of the company? Measuring performance of subordinate managers and linking results to their compensation addresses this control issue. Therefore, decentralization has to go together with changes in measuring performance and compensating managers.

### **Performance Reporting**

The measurement focus in this company for *incentive purposes* was on net profit for the dealership managers (see below). However, for *reporting purposes*, the company developed what they call a “balanced scorecard” on a weekly basis as well as monthly reports with more detail (line items). These reports included both financial and nonfinancial information.

There is not much to be commented on regarding these performance reports, other than that the reports were used as instruments to communicate the company's most important objectives to the dealership and department managers; to provide these managers with the information they needed to do their jobs; and to provide feedback to top management so that they could monitor the lower-level managers' performances. In other words, these reports put the needed information in the hands of the responsible managers to support their decentralized decision-making.

If they wish, instructors can comment on the use of the term “balanced scorecard.” Here the term is used very loosely. While it is true that the Kooistra reports contain both financial and nonfinancial information, the information is by no means organized in the “template” balanced scorecard measurement categories (financial, internal operations, customer, and learning and growth). Neither is it clear how each of the measures included “map into” the company's strategy and objectives. They may, but these links are by no means explicit. Is this so because

the car dealership “business model” is inherently simple? Or if it is complex, is it well understood by all?

Instructors can also note that the measures in Kooistra’s so-called “balanced scorecard” primarily include financial measures (sales and profits) and productivity measures. Do these measures provide a good indication of value creation in the car retailing business? The answer is probably yes. This is primarily a short-term business. Dealerships are not making many investments that involve large lags between time of investment and payoff (such as R&D), and they are not creating many intangible assets. The one exception is customer goodwill, no measure of which is—surprisingly—included in Kooistra’s “balanced scorecard.”

Does this imply that the Kooistra top management is ignoring an important value driver in their business? Not really. Customer satisfaction ratings are available and are considered by top management to decide subjective bonus awards, but they are not reported in the weekly balanced scorecards. The reason for their exclusion is, of course, that these measures are simply not available on a weekly basis.<sup>1</sup>

### **Budgeting**

Kooistra Autogroep also introduced a formal budgeting system, the main purpose of which was to set annual net profit targets for the dealerships. Budgeting was intended to be bottom-up, but due to the lower-level managers’ lack of experience with budgeting and their lack of formal business training, top management seemed to have the “last word” when it came to setting the final net profit targets. Perhaps because of this, several quotes in the case indicate that there might be a lack of commitment to the budget at least for some of the managers. Nonetheless, top management considered the budget targets to be “achievable with considerable effort.”

Instructors could also note that in this business top management may actually be quite well positioned to “impose” targets to a certain degree. Good historical data on sales and profits are available; there are industry data sources to benchmark performance; the business is quite stable year-over-year; the various dealerships within the company are quite comparable to allow some relative performance evaluation; and top management knows the business well.

### **Incentive Plans**

Finally, Kooistra Autogroep expanded its existing bonus plan for salespeople and introduced a pay-for-performance bonus plan for dealership and department managers. Before this change, managers were paid on salary and were eligible for annual raises that were determined in large part by industry-wide negotiated “collective agreements.” Thus, before the change, virtually none of the compensation that managers received was merit-based.

### **Salespeople**

Of the 45 salespeople at Kooistra Autogroep, only 25 were bonus-eligible because some of them had negotiated a compensation package without a bonus contingency when they were hired, sometimes at a dealership that had been acquired. Does this create “equity” issues? Possibly yes, particularly when the different compensation systems result in highly-varied compensation payouts within the same class of employees.

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<sup>1</sup> Importers/manufacturers usually organize the customer satisfaction surveys. The frequency of these surveys varies by brand. Most brands conduct a survey every three months.



A bonus-eligible salesperson earns €18.50 per car sold. When the salesperson meets his or her monthly sales target (in terms of number of cars sold), the bonus amount is doubled to €37.00 per car for the month. On average, bonus payments are about 25% of salary for salespeople who meet their targets.

This bonus plan encourages sales, in units; not profitable sales. Is this consistent with the company's objective of maximizing net profits? The target feature even exacerbates the focus on unit sales as the bonus for the month is substantially lower if the unit sales target is not met. Does this cause salespeople to "push" sales for sales sake, regardless of the profit margin on the sale? Does it cause salespeople to "push" sales so hard at month end (when they are within reach of meeting the target) that it might hurt the customers' purchasing experience and customer satisfaction? In sum, this bonus plan seems ill-aligned with two of perhaps the most important company's objectives: profitability and customer satisfaction. Should this bonus plan be changed to incorporate other performance criteria, such as gross or net profit per car? The answer to this question seems almost certainly yes!

### *Managers*

Target bonuses for dealership managers were set between 10% and 20% of annual salary. Target bonuses for department managers were set at eight% of annual salary. For dealership and department managers, the bonuses were based on the extent to which the managers met their annual net profit targets as set during the budgeting process. Only managers who met their net profit target earned their target bonus. No bonuses were paid for below- or above-target performance. Management also reserved the discretion to reduce any or all bonus awards (e.g., when customer satisfaction ratings were deemed too low), but such discretion had never been exercised.

In this bonus system, the managers earn their whole target bonus only when they meet target; they don't earn any bonus if they miss the target and they don't earn any extra bonus for overachievement. There is no "minimum performance threshold" (e.g., 80% of target) at which managers start earning a portion of their target bonus (e.g., 60% of target bonus). This means that the whole bonus rides on meeting target, which creates strong incentives for managers to meet the target (hopefully only through "legitimate" decisions, as opposed to "managed" performance).<sup>2</sup> This also implies that there is a strong *disincentive* to miss target by a tiny amount. Not meeting target by a small margin is as bad as not meeting target by a wide margin. This creates temptations to shift performance into the next period when the target for the current period is not met, which is also known as "taking a bath." Performance shifting into the next period is also likely for performance above target as no bonus is earned in this period for over-target performance. In sum, the bonus system is prone to encourage gameplaying behaviors due to the all-or-nothing target features of a "floor" and "cap" on performance at target.

However, do dealership managers have any leeway to shift income across evaluation periods? One might argue that they don't have much. Sales (revenues) are derived as customers come to the dealership when they come. While that is true, some carefully-timed sales promotions might shift sales from period to period. Moreover, dealership managers can certainly shift expenses across evaluation periods. They can, for example, postpone or accelerate maintenance, facilities upkeep, personnel training, and even hiring.

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<sup>2</sup> For example, see M. Jensen, "Corporate Budgeting Is Broken—Let's Fix It," *Harvard Business Review* (November 2001), pp. 95–101.

Instructors may also raise the following questions. Are the bonus potentials large or lucrative enough to have impact? Is net profit the right measure? Should some portion of the bonus be based on overall company performance instead of being exclusively based on entity performance?

In summary, *Assignment Question 2* asked to evaluate the budgeting, performance measurement and incentive systems used at Kooistra Autogroep. Based on the above analysis, the answer to this question is mixed at best, and on some dimensions even poor, for the following reasons:

- The performance reporting may not be paying sufficient attention to a critical driver of performance in this business—customer satisfaction. Moreover, neither does the incentive system.
- There are potential issues of commitment to the budget, in part perhaps because the subordinate managers are lacking budgeting experience and business training. Budget targets are nonetheless very important for incentive purposes due to the all-or-nothing bonus target feature. Does this cause the managers to want to lowball their budget targets?
- The bonus plan for salespeople is limited in scope, including only 25 of the 45 salespeople at Kooistra Autogroep, thus potentially creating equity problems. The bonus plan for salespeople is also poorly aligned with the company's objectives of profitability and customer satisfaction.
- The bonuses for managers are exclusively based on net profit of their individual entities, and the bonus target feature is likely to induce gameplaying. Should there be a bonus for teamwork, such as by making some proportion of the bonus dependent on company-wide performance? (Perhaps not, as the scope for synergies is limited.)
- The bonuses are all formula-based, even though discretion can, but has not been, exercised. Would it be useful to exercise discretion in case unforeseen events unfold, when performance manipulation is alleged, or to reward otherwise hard-to-measure aspects of inherently multi-task jobs (such as, particularly, customer satisfaction)?

## Early Experiences

The last section of the case quotes a dealership manager who opines that the company should abolish the bonus system for (department) managers, as he believes that the bonuses don't make the managers work hard(er). However, he also mentions that that might be due, at least in part, to the bonuses being too low to motivate. In other words, this quote suggests one of two possible courses of action: either abolish the bonuses or make them more substantive.

Top management, on the other hand, unequivocally embraces pay-for-performance, although they acknowledge that in the current system target setting remains an issue. (This is, as we have discussed, because the bonuses are completely predicated on meeting target, and so if the target is flawed (e.g., unduly hard to achieve), so will be the motivational effects of the bonuses.)

The case also mentions that pay-for-performance was a relatively unknown phenomenon in Dutch companies, although there is some evidence of its advent. Moreover, Exhibit 3 of the case provides some statistics about both the incidence and magnitude of bonuses in United States and Dutch car dealerships. The differences are stark.

With these opinions and facts in mind, **Assignment Question 3** was designed to motivate a discussion of whether incentives drive employees to perform at their best. Instructors can either have this discussion with reference to Exhibit 3 in the case or by specific reference to the Puente Hills Toyota case study.

Either way, instructors could point out that in Puente Hills Toyota (or the U.S. car retailing sector, on average), the composition of the compensation package is fundamentally different than in Kooistra Autogroep (or the Dutch car retailing sector, on average). In Puente Hills Toyota (the U.S. car retailing sector) a much larger portion of total compensation is variable, whereas in Kooistra Autogroep (the Dutch car retailing sector) total compensation almost exclusively consists of fixed salary with, sometimes (i.e., low incidence), a small portion of total compensation being performance-dependent.

Is this because Americans and the Dutch have fundamentally different risk profiles? Some quotes in the last section of the case would suggest that is indeed the case. However, the little evidence available does suggest only a relatively small difference in “uncertainty avoidance,” so this may not be driving all of the difference. For example, in Hofstede’s seminal study,<sup>3</sup> the United States has an uncertainty avoidance score of 46, whereas the score for the Netherlands is 53—not a big difference. The United States, however, has a significantly higher score for masculinity (62) compared to the Netherlands (14). Masculinity involves a respect for agency and achievement, which is clearly consistent with a system that links pay to performance.

Beyond national culture differences, there are other possible drivers of the observed differences in pay-for-performance practices across both companies (countries). Instructors may solicit from the students what they think these might be. The list could include differences in income taxes, laws and regulations, unions, and industry practices; the influence of compensation consultants; or perhaps just fundamentally different views of “model of man,” such as whether employees are viewed or treated as *stewards* or *agents*.<sup>4</sup>

Finally, and specifically with respect to difference between the bonus plans of the two companies, instructors can note that the bonus plans for managers at Puente Hills Toyota is akin to a *commission*-type bonus scheme, meaning that the managers will almost certainly earn some bonus; whereas at Kooistra Autogroep the bonus scheme is akin to a *hurdle*-type plan, meaning that the managers only earn a bonus when the target is met, making it more likely that no bonus is earned (thus imposing more risk on the managers).

Apart from discussions about the differences in situational factors that might help explain, or at least provide clues about, the observed differences in incentive practices across both companies (countries), instructors can also ask students’ opinions about whether or not they believe incentives work; that is, do they make employees work harder? We suggest letting this discussion flow freely with students perhaps arguing mostly among themselves with little intervention by the instructor.<sup>5</sup>

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<sup>3</sup> G. H. Hofstede, *Culture’s Consequences* (Beverly Hills, CA: Sage Publications, 1980).

<sup>4</sup> Instructors may find the following article particularly insightful to help sort out this discussion: M. Beer and K. Nancy, “Do Incentives Work? The Perceptions of a Worldwide Sample of Senior Executives,” *Human Resource Planning* 26, no. 3 (2003), pp. 30–44.

<sup>5</sup> Instructors may find the following article particularly insightful to help sort out this discussion: A. Kohn, “Why Incentive Plans Cannot Work,” *Harvard Business Review* 74, no. 5 (September–October 1993), pp. 54–60.

To conclude, instructors can point out that incentive pay can serve any or several of many purposes, including:

- **Attraction/retention of employees.** Paying employees only guaranteed salaries tends to attract risk-averse employees. Paying performance-dependent compensation tends to attract employees who are more risk tolerant, more aggressive, or more confident in their abilities. What type of employees does a car dealership want? (Tom Kooistra seems to believe he would like more of the latter type.)
- **Motivation.** Motivation has two elements. One involves *inducing effort*, getting employees to work hard. The other is *directing effort*, helping employees understand what is expected of them. In the case of Kooistra Autogroep, the induction of effort seems not to be a problem, at least according to some of the quotes in the last section of the case, although Tom Kooistra questions that premise. However, Tom Kooistra also believes that he needs to inform and remind employees about what is important for the company to succeed. Thus, this is another important purpose of the new bonus system.
- Finally, **pay-for-performance makes at least some portion of the compensation expense variable with company performance.** Given the eroding margins in the Dutch automobile sector, this may be another feature of introducing bonuses at Kooistra Autogroep; it makes compensation expense higher (lower) when the company can best (least) afford it.

## Houston Fearless 76, Inc.

### Teaching Note

#### *Purpose of Case*

This case describes a sales incentive system based on a traditional commission payouts and a proposal for change. The proposal raises a number of issues regarding performance measurement, performance standards, and calibration of incentive awards. One interesting part of the proposal is a “truth-inducing” feature designed to motivate the salespeople to make accurate sales forecasts. An interesting unsolved issue is whether to and how to provide incentives for selling products with negative gross margins, which the company still wanted to sell for strategic purposes.

#### *Suggested Assignment Questions*

1. Why are Houston Fearless 76, Inc. (HF76) managers unhappy with the company’s existing sales incentive plan? Are weaknesses in this plan a major cause of the company’s performance problems?
2. Evaluate the new incentive plan being contemplated. What modifications would you make to the proposed new plan, if any? How would you address the unresolved issues?
3. Are there any significant impediments to the successful implementation of the new incentive plan? If so, which?
4. Would you make any changes to the system providing bonuses to sales assistants? If so, what?

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*Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Houston Fearless 76, Inc. case.*

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## **Case Analysis**

### *What does HF76 want from its salespeople?*

Before getting into a discussion of the old and new sales incentive plans, it is useful to have the students clarify the company's markets and to identify the behaviors that HF76 managers would ideally like from their salespeople. HF76 is organized into four business units: HF International, Extek, Mekel, and Pollution Control Systems.

- a. HF International (photo processing)
  - Mature market
  - Known customer base
  - One salesperson in the East (lives in Maryland).
  - Sell through distributors in the West.
- b. Extek (micrographics)
  - Mature market
  - Customers are government entities
  - 125 dealers
  - One salesman working in a specific market (lives in St. Louis). He also has the task of culling the dealer list. (Where is his motivation for that?).
- c. Mekel (scanners)
  - More high tech, more growth potential
  - Two salespeople; 1 domestic, 1 foreign.
- d. Pollution control systems
  - Only one sale to date
  - One salesman with little sales experience
  - Company sees this market as having great potential.

### *What does HF76 want its salespeople to do?*

- Provide good service to existing customers. This is particularly important in the mature markets.
- Allocate their time effectively, particularly to sell in the most profitable markets.
- Find good new customers and to open new markets.
- Provide accurate sales forecasts.

### *What should be the goals of the sales incentive system?*

- Motivation (stimulate effort)

- Direct attention (communicate what is important)

An incentive system is imperative in this setting. Because of the geographical dispersion of the sales force, close monitoring by management (action control) is not feasible.

*What are the key elements of the existing sales incentive plan?*

Because of the complexity of this, and actually most incentive plans, we suggest laying out the features of the old and proposed plan in a structured manner. We have outlined the major elements of both in Figure TN-1. (This format is useful for summarizing the elements of the incentive plans in many cases.)

*What are the problems currently being faced?*

- Dealers and sales reps do not share customer lists.
- Salespeople are not developing new customers. Most of them merely respond to inquiries.
- Salespeople are spread all over the country. The VP-Sales is in Atlanta. The organization is hard to control/monitor.
- The salespeople have not received performance evaluations recently, or raises.
- Sales tracking is just being computerized.
- The sales forecasts are inaccurate. Can they be made more accurate?
- The company is paying commissions whether the salesperson causes the sale to occur or not.

*What are the key elements of the proposed incentive plan?*

See Figure TN-1.

It is useful to clarify the shape of the performance/reward function. The slope of the payout function in the existing system was 2–4% of sales. The slope of the function in the proposed system is much steeper. No bonuses are paid for the first sales, up to 70% of forecast, and then the kinked function goes up sharply. The company managers reasoned that the first 70% of sales would occur anyway, even if the salesperson was lazy. Therefore, the incentives for the sales force to sell a lot have increased markedly.

These slopes can be illustrated with a hypothetical example. Here is one that can be used:

Assume a high margin sale = 30% GM

Price = \$100,000 (a scanning system)

Commission rate = 2%

Assume that plan = \$1.6 million sales

$$= \$1.6 \times .3 = \$480,000 \text{ gross margin}$$

Under the old plan

Commission on the one sale = \$2,000

GM for company = \$30,000

At plan, company GM = \$480,000

Salesperson earns \$32,000

Under the new plan

At 70% of plan (\$1.12 M in sales):                      Company GM = \$336,000

Salesman commission = 0

At 100% of plan (\$1.6 M in sales):                      Company GM = \$480,000

Salesman commission = \$35,000

Slope =  $35k / (1.6 \times .3) = 7.3\%$

On \$100,000 sale > 100% plan:                      Company earns \$30,000

Salesperson earns \$9,100 (slope = 9.1% of GM)

### *Evaluation*

Students should be asked to evaluate the plan and to provide recommendations for improvement. There are a lot of issues that can be discussed. Students will raise most of the obvious measurement and calibration issues. A good student report on this case is appended to this teaching note.

Here are some other questions that can be posed if they do not come up naturally:

- Is the weighting of the three aspects of performance correct? Is this enough incentive for forecast accuracy or for the individual MBO items? (It seems small.)
- Does the start-up business (pollution control) fit this plan? (No.)
- How should HF76 provide incentives to sell products that are sold at a negative gross margin? HF76 had a number of these products, which managers wanted to keep selling for customer access and service reasons. This is a difficult issue that HF76 managers had not solved. Any of a number of approaches could have been used, such as guaranteeing the sales force a minimum gross margin percentage on each sale.

Other, perhaps more peripheral, questions that can be posed, time allowing:

*Should anything have been done with the incentives for the sales assistants?*

This aspect of the plan does not seem to have any motivational value. On the other hand, it is not expensive. Perhaps the value of this part of the plan is as a wealth-sharing feature. It makes the assistants' total compensation slightly variable with overall results. This feature allows the company to pay the sales assistants more when it is able to do so, and it allows them to save cash when times are tightest.



*Should HF76's managers have been satisfied with measuring and providing rewards for profits on sales down only to the gross margin line, rather than down to a "bottom-line" product profit figure?*

The sales people do not control much below the gross margin line (only their selling expenses). Still, ideally incentives should be based on full cost numbers and even, possibly affected by information about the profitability of particular customers. If the costs below the gross margin line vary across products, this information and the associated incentives can change the salespeople's focus. However, HF76 is a small company. It does not have in place the sophisticated cost system necessary to provide this information.

### **What the Company Did**

The company presented the proposed plan to the sales force and met with unanimous and strong objections. The top managers decided that the change was too radical, so they backed off on their plan to make the change. Instead they modified their old plan. They left the old commission plan in place, but they added three extra rewards. One was an extra bonus of 5% of salary if total year-end sales were within plus or minus 10% of the sales forecast. The second was an extra bonus of up to 3% of salary if the salesperson achieved a set of MBO-like objectives. Moreover, the third was an extra bonus of up to 3% of salary if the salesperson kept travel expenses within the planned limits. The company wanted the salespeople to be motivated to search for lower airfares and cheaper hotels.

These changes are described in the *Houston Fearless 76, Inc. (A): The Aftermath* case appended to this teaching note. In addition, appended is the *Houston Fearless 76, Inc. (B)* case, which provides information on the company from January 2002, a year later than the (A) case. These cases provide information that the instructor can give to the students at the end of class. Alternatively, to save time, one of the cases can be handed out at the end of class.

### **Pedagogy**

This case contains a lot of issues that can be discussed. Thus, the instructor will have to provide some structure to the discussion to ensure coverage of the issues deemed most important. The discussion above presents one possible structure. If that structure is used, the class timing could be approximately as follows:

1. The company and the salesperson role	10 minutes
2. The existing incentive plan	5
3. Problems with the existing plan	10
4. The proposed incentive plan	15
5. Evaluation and suggestions for improvement	30
6. What the company did	<u>5</u>
Total	75 minutes

**Figure TN-1**

**Key Features of the Existing and Proposed Sales Incentive Plans**

	<b><i>Existing Plan</i></b>	<b><i>Proposed Plan</i></b>
<i>Who is included in the plan?</i>	Salespeople	Salespeople
<i>Form of payment?</i>	Cash	Cash
<i>Frequency of payment?</i>	Monthly	Annual award, but monthly advances at 80% rate
<i>Measures and weighting?</i>	Sales (100%) (Shipments within assigned territory)	<ul style="list-style-type: none"> <li>- Product gross margins (83%)</li> <li>- Forecast accuracy (extra 5% of salary) (8%)</li> <li>- Achievement of MBO targets (extra 5%) (8%)</li> </ul>
<i>Performance standards</i>	--	Salesman forecast of gross margin
<i>Reward/performance function?</i>	Linear	<ul style="list-style-type: none"> <li>- Zero up to 70% of GM forecast</li> <li>- 25% higher slope &gt; 100% of forecast</li> </ul>
<i>Size of reward?</i> - <i>Expected</i> - <i>Maximum</i>	<ul style="list-style-type: none"> <li>- 50% of base salary</li> <li>- none</li> </ul>	<ul style="list-style-type: none"> <li>- 60% of salary?</li> <li>- none</li> </ul>
<i>Funding?</i>	As necessary (no bonus pool or corporate constraint)	As necessary
<i>Uniformity across company?</i>	Yes	Yes

## Houston Fearless 76, Inc. (A): Aftermath

On November 25, 2000, James Lee proposed the new plan in the annual sales meeting. Salespeople all voted against the plan, particularly the idea of replacing the sales-based commission plan with a profit-based bonus plan. Here are some quotes from salespeople:

I understand that firms need to generate profitable sales and cash inflow. However, why should we salespeople be held accountable for profitability? If the product is unprofitable, that was caused by top management's pricing decision, or their decision to keep the product offering.

.....

Historically, HF76 has not had a good cost accounting system that could track accurately the costs incurred to make a specific product. How can I trust that the profit number is correct for the products I have sold?

.....

We all understand that, from an operations perspective, more accurate forecasts are always preferred. However, given the nature of capital products, accurate forecasts are difficult even if you work with customers closely. You know sales are going to happen but you just do not know when. A sudden cut in the customer's budget would delay the purchase. Forecasts are just a best guess. Tying commissions to targets would probably just make us to forecast more conservatively.

Because of the opposition from the sales force, James and M.S. Lee pulled back from their intention to implement the new, proposed sales incentive plan. In January 2001, they implemented a new sales incentive plan that was dramatically different from the proposed plan. The final incentive plan made only minor changes to the existing commission plan. Salaries and sales commission rates remained unchanged.

However, the new compensation plan provided **extra** rewards, on top of the existing commission structure, in the following ways. First, salespeople could earn 5% of their salary if

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total year-end sales were within plus or minus 10% of sales forecast. Second, salespeople would earn an extra 3% of salary if they achieved each of the goals in a set of MBO targets negotiated by management and salespeople. Finally, a maximum of 3% of salary would be awarded if total year-end travel expenses were kept below the approved travel expense plan.

About the new plan, James Lee explained:

This is the first step in moving our sales force to even think about other objectives beyond sales. HF76 has always had the culture to make sales, even if it meant selling at a loss. This new plan at least provides salespeople with incentives to improve forecast accuracy and to address some of the firms' strategic needs. More importantly, our salespeople liked the plan. Getting sales people committed and motivated is the most important issue.

However, James also realized that his attempt to revamp the sales incentive system based on his original idea was largely unsuccessful. He reflected:

The fate of the new plan is not totally unexpected, although it is disappointing. I noticed that the sales personnel were against the new plan from the very beginning of our meeting. There are some good reasons for their opposition. For example, moving toward a profit-based incentive system would require a relatively accurate cost system, and we do not have one in place. Technically speaking, revamping our cost accounting system is feasible. However, I was quite surprised to hear how low our accounting department's credibility is among our sales force. [Our VP-Marketing] was very concerned about whether the accounting department could even record their sales commissions correctly. In addition, HF76 has a wide range of product lines with different profit margins. It could be too complicated to figure out how to set the appropriate parameters to maintain fairness and to communicate our product market strategy. More important, profit-based incentive would affect every dimension of our organization. A profit-based system would imply that my father had to refrain from intervening in pricing decisions. A profit-based system would also give too much power to sales to decide which product to sell and which not to sell. The danger is that we might lose control of our overall product market strategy.

Ideally, I want our firm to move swiftly in the new direction. However, we have to realistically consider the organization's ability to absorb significant changes in a relatively short time period, especially for an organization without changes for so many years. We had to make a choice between losing our salespeople and changing our proposed new plan.

## Houston Fearless 76, Inc. (B)

In January, 2002, M.S. Lee, President/CEO of Houston Fearless76, Inc. (HF76), expressed some optimism about the changes that had occurred at the company:

We used to have overly optimistic sales forecasts, but now I feel they are more realistic. Two salespersons met their forecasts and will receive a bonus, and the others have some work to do for 2002. I could tell they paid attention to certain things including travel and expenses, and two salespersons will get their travel and expense bonus. We placed heavy incentives on Bob Smith, Vice President-Marketing, and he achieved 51% of his revenue goal. Mark Fogarty's (pollution control) compensation was changed to 4% commission on pollution control sales, but no units were sold commercially in 2001.

Overall, I think we have a better handle on sales, except in pollution control, but we are facing much larger challenges right now. Since we obtained the Fujifilm distribution agreement in September, the dynamics of the company have changed. We need to reorganize the company, and I want an effective organization to get things accomplished.

On August 13, 2001, HF76 and Fuji Photo Film U.S.A., Inc. (Fujifilm) announced that HF76 obtained an exclusive distribution agreement for Fujifilm's micrographics products for the United States and Canadian markets. Ken Kopald, then Vice-President and General Manager of Fujifilm U.S.A.'s document products division also announced that he will be leaving Fujifilm after 29 years of service and join HF76 as President of Ascendant Solutions International (ASI), a subsidiary of HF76:

ASI is now responsible for sales, marketing and service of all HF76 document imaging products (including Exttek duplicators, Mekel scanners, and HF processors) and Fujifilm chemistry, film and other related products. We will also add products from other vendors if a good business opportunity exists. ASI will integrate former Fujifilm salespersons and service technicians, integrate them with HF76's sales and service force, and form a sales and service organization organized by regions allowing them to cross-sell all HF76 and Fujifilm micrographics products. We have an excellent

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*James Lee, an Executive MBA graduate, and Professor Larry Greiner wrote this case as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.*

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opportunity to bundle the consumables with the equipment, and integrate both customer lists from Fujifilm and HF76.

Ken Kopald built from scratch his sales and service organization at Fujifilm U.S.A., which grew to 30 employees involved in sales, customer service, and technical service. As the microfilm industry matured and with the advent of digital imaging technologies, revenue declined. However, the industry is expected to level as microfilm becomes more narrowly defined as a long-term archiving medium. With total HF76 revenues at \$14M for 2000, the addition of the Fujifilm business will significantly boost company revenue. Although profit margins are lower on the film and chemistry consumables, analyses showed potential profits. In the preparation of forming ASI, several budget meetings were held and budgets were formulated going forward.

As Ken developed the transition plan, he adopted the sales compensation structure (base salary, commission, MBO targets, and Forecast Bonus) that HF76 had implemented in 2001 for three reasons: (1) simplicity, (2) familiarity, and (3) flexibility.

The plan is relatively simple but communicates much more than just a base salary and flat rate commission. Also, our former Fujifilm sales staff was already used to a similar plan at Fujifilm. And, we can shape direction by boosting commissions for the more profitable products such as scanners and duplicators. We also weighted the compensation more heavily on the commissions. We needed to be more equipment-oriented so we took the HF76 weighting of about 40/60 (base/commission) instead of the 60/40 we had with the more repetitive film and chemistry sales.

### **Company Performance**

As of late January, financial statements for 2001 were not available from the Accounting Department. Sales performance for recent years and projections through 2003 are provided in Exhibit 1.

### **Growth Challenges**

The number of sales transactions has increased ten-fold and several departments have experienced growing pains. Before ASI, HF76 would process 5 to 10 orders per day for spare parts or custom-built equipment. Now, HF76 is receiving 40 to 70 orders per day for film and photochemicals our customers typically want the next day. M.S. Lee remarked, "We have changed from a manufacturing company to a distribution company overnight. Several other areas need to change, too."

### **A New Organization**

A new organization (Exhibit 2) was being contemplated by M.S. Lee. "We have all this good business, but we have problems executing our goals. I currently have too many people directly reporting to me. I need to cut that number to 5 or 6 instead of the 11 I have now."

**Exhibit 1**

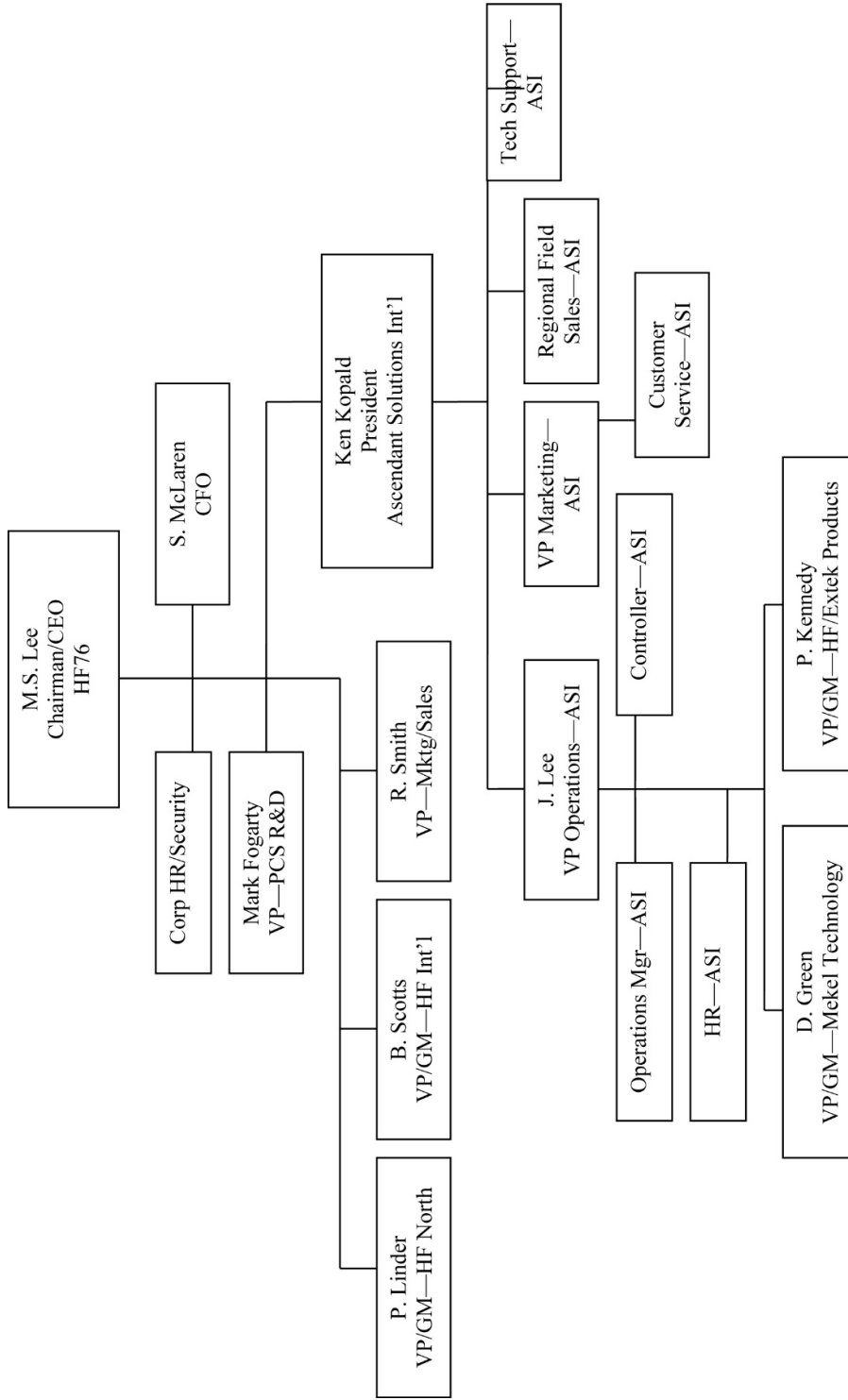
**Houston Fearless 76, Inc.**

**Sales History**

	<b>2000</b>		<b>2001</b>		<b>2002</b>		<b>2003</b>	
	(Actual)	%	(Estimated)	%	(Forecast)	%	(Forecast)	%
<b>Government</b>	5,477,503	40.7%	4,773,444	26.7%	4,725,000	15.8%	4,961,250	14.5%
<b>Commercial</b>	7,977,520	59.3%	13,114,642	73.3%	25,180,000	84.2%	29,204,600	85.5%
<b>Total</b>	13,455,023	100.0%	17,888,086	100.0%	29,905,000	100.0%	34,165,850	100.0%

**Exhibit 2**

**Proposed Reorganization—2002  
Houston Fearless 76, Inc.**





## Houston Fearless 76, Inc.

### Teaching Note

#### ***Addendum: Student Exam Assignment and Report***

Below is one relatively representative example of a student analysis of the Houston Fearless 76, Inc., (HF76) case as an exam assignment. We show the exam rules, the assignment questions, and then the student exam report.

#### **Exam Rules**

1. Next week's midterm exam will be **take-home**. It will consist of a case similar to the cases analyzed in class. I will post the exam case and the assignment questions in the class folder exactly 48 hours before the exam submission deadline.
2. The exam can be done individually or in groups of up to three people. Groups will have to monitor and manage themselves. All members of the group will receive the same grade on the exam. ***It is your responsibility to ensure that your name appears on the group's submission.*** Once you have formed a group, you may discuss the case with members of your group only and *not* with the members of *other* groups.
3. Case reports (individual or one per group of three students maximum) must be e-mailed to me by the scheduled exam deadline. ***Late assignments will not be accepted and will result in a missing grade for the exam.***
4. I will not answer any questions regarding the exam to avoid (perceptions of) unfair treatment by students who ask questions and those who don't. (No phone calls. No e-mail. None. Zero. Period.) If you make assumptions (by lack of information in the case study or other), just state them clearly and *justify them*.
5. Please make a comprehensive analysis to support your answers to the assignment questions, but papers should be as concise as the subject matter and analysis permit (four pages

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*Professors Kenneth A. Merchant and Wim A. Van der Stede prepared this teaching note addendum as an aid to instructors using the Houston Fearless 76, Inc. case.*

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maximum). The questions require answers consisting of complete sentences—not one-word answers. Bullet points or outlines are acceptable as long as they are properly tied into your answer to the question and the totality of your answer is comprehensible. The reports are to be typed in 11-pitch font, single-spaced, with one-inch margins on every side. (*These are not exercises in creativity with page layouts.*) The **four-page limit** does not include supporting exhibits, which should be kept to the necessary minimum. Grades will be based on soundness of analysis, application of relevant principles, and clarity of exposition.

6. If you cannot comply with the exam deadline or any other exam rule spelled out above, you need to contact me as soon as possible, but certainly **before I post the exam**. I will maintain a tough stance toward exceptions, such as a request for an extension of the exam deadline, for the following reasons:
  - a) This is a *take-home, open-book, open-note*, “open-everything” exam.
  - b) You have *two days* (48 hours) to complete the exam.
  - c) You are reading these instructions now, thus, up to about one week before the actual exam is posted. This should give you enough time to schedule a block of time in your calendar to work on the exam.
  - d) The exam case and questions will be made available in *electronic format* in the class folder, and the exam should be e-mailed back to me. Thus, the exam is accessible anywhere at any time, and physical presence at USC is not required to complete the exam.

## Assignment Questions

### Case Background

The Houston Fearless 76, Inc. (HF76) case study discusses a proposal for change in a sales incentive program. The new program is interesting for a number of reasons, including a proposed shift toward rewarding the generation of profits (actually gross margins), rather than just sales, and a “truth-inducing” forecast incentive feature.

### Case Questions

[Q1 = 30 points/Q2 = 30 points/Q3 = 30 points/Q4 = 10 points]

1. Evaluate the old incentive plan as well as the new incentive plan being contemplated. Are there any significant impediments to the successful implementation of the new incentive plan? Which?
2. Should HF76’s managers have been satisfied with measuring and rewarding profits on sales down only to the gross margin line, rather than down to a “bottom-line” product profit figure? (More generally, discuss the issues associated with incentives placed on sales, gross margins, and net profits.)
3. What modifications would you make to the proposed new plan, if any? Formulate specific recommendations.
4. Would you make any changes to the system providing bonuses to sales assistants? Which?

## **Student Report**

### *Current Situation*

Houston Fearless 76 (HF76) manufactures and sells products for several different markets, including photo processing, micrographics and motion picture processing, scanner products, and most recently, pollution control systems. The company has products in varying stages of the life cycle. M.S. Lee intends to increase sales and profitability in each market through strategies based on its corresponding life cycle stage.

HF76 is currently experiencing several problems. Sales of its products have slowed. Although this trend is in part due to market conditions, M.S. Lee believes the company is “not doing enough to develop new markets, to expand [its] existing markets, or to develop synergies among [its] markets.” In addition, the company’s managers believe that HF76’s performance is “lacking behind that of its major competitors on all dimensions.” HF76 is also encountering production-planning problems, which are linked to problems in forecast accuracy. Production planning is a critical success factor and is especially important due to the high cost and low volume of its products. Due to poor forecasting, HF76 is often forced to go to a semi-JIT inventory system where production is increased in response to sales orders. This has two negative side effects. First is the increase in cost to HF76. Manufacturing is forced to fill rush orders by way of overtime labor hours, thus increasing the cost of labor, which has the eventual effect of increasing cost of goods sold. The second side effect is that regardless of how fast HF76’s manufacturing division is able to produce, it is often too slow for the sales force. This has the potential to lead to unsatisfied customers and lost sales.

M.S. Lee believes that many of the company’s troubles are related to the present sales force incentive system. This system provides a base salary of \$40,000 to \$60,000 and a commission as a percentage of sales on products shipped within a salesperson’s assigned territory. The commission percentage differed across salespersons according to product characteristics, market situations, and other factors such as length of time with the company. HF76 sells products that have widely varying gross margins, some of which are even negative. The current compensation structure encourages sales, but not necessarily sales of the most profitable products. Further, because commissions are paid starting with the first dollar of sales there is no direct motivation to reach a particular sales target figure, and there is no incentive to formulate accurate sales forecasts.

### *Proposed Incentive Plan*

HF76’s new incentive plan is an attempt to realign the sales force’s goals to address problems that HF76 is encountering. M.S. Lee had previously communicated to the sales force, which products were the most profitable; however, this “communication” has had no impact on behavior. The new system is designed to translate that message into financial terms. In an effort to stimulate profits, rather than simply revenue growth, the new system will pay commissions as a percentage of gross margins instead of sales. Additionally, M.S. Lee has made it a priority under the new compensation scheme to improve his sales force’s forecasts. He has attempted this in two ways. The first method is by setting the 70% forecast “floor.” By not paying commissions until 70% of forecast is met, he intends to discourage overly optimistic forecasts. The second method is through the 5% of base salary bonus paid for annual sales within the 10% corridor of forecast. If a salesperson falls short of 90%, or sells over 110% of forecast, he or she will lose the 5% bonus. The final component of the new incentive plan involves MBO targets, which are negotiated and subjective measures of performance upon which an additional 5% of base salary would be awarded.

The proposed system presents several problems. The change from commissions based on sales to commissions based on gross margins has several inconsistencies. First, the percentage of gross margin paid ranges from 10–12% on high margin sales to 30–35% on low margin sales. This range in percentage paid seems to negate the effect it is supposed to create. In order to induce salespeople to sell higher margin products, the rate paid on those margins should be constant. On the other hand, if the plan is structured in this way out of fairness, in that different salespersons only have access to products within a narrow gross margin percentage (some low, some high), then the plan to encourage high margin sales does not make sense. In that case, it would be beyond a salesperson's control to pursue high margin sales over lower margins. From the information available, it appears that the latter is closer to the truth. We assume that there is some margin variation within particular divisions and product lines, but that the variation across divisions and product lines is greater. Therefore, to promote higher margin sales, the percentage paid should be constant within a division and for any one salesperson. However, in the interest of fairness and equity, the percentage should vary across divisions and salespeople.

The system also does not solve the forecasting problem. The 70% floor now encourages sandbagging as opposed to optimistic forecasting. The increase in commission rate paid beyond 100% has the same effect. It seems that while there is some disincentive over the sale of the marginal unit that pushes a salesman over the 110% threshold, that disincentive is more than compensated for by the increase in commission rate paid for sales in that range. The plan will induce salespersons to provide artificially low forecasts, and their subsequent compensation will be well beyond what was intended. Absent a more effective forecasting approach, this new compensation system will not be effective in alleviating the forecasting problems of the past.

There are also problems with MBO targets. The advantages to these targets are that they can be tailor-made by M.S. Lee to address specific concerns that he has about his sales force. The major impediment is the lack of "communicability" of the MBO targets. Salespeople often prefer clearly defined compensation plans; incentives such as the percentage of sales are easy to understand.

One advantage that HF76 has for using the MBO goals is that it is a relatively small company with a family atmosphere. In this setting, M.S. Lee has the opportunity to tailor the goals to each individual.

An important problem in the forecasting area that M.S. Lee has not addressed is the difficulty of providing an accurate forecast. All of the salespeople complain that forecasting is extremely difficult, given the low volume of sales, and the abnormally long sales leads required to close a sale (often exceeding one year).

### ***Sales vs. Gross Margins vs. Net Profits***

The new compensation plan pays commissions on gross margins instead of net profits or sales. This results in salespeople being measured by sales and also production cost. Many organizations measure salespeople performance as revenue centers and measure performance based on sales. Sales personnel are responsible for making the sales and not for production. However, HF76 is different since it is selling low volume and expensive capital equipment. Production is often tailored to a specific sale that a sales person makes. Therefore, it is important for salespeople to consider production issues when making a sale.

Management does not want salespeople to be making sales that result in little or no profits. Measuring performance on gross margin forces salespeople to consider the cost of the

good sold. Salespeople will focus on quality sales that produce a profit for the company. Gross margin measures require a good communication flow between sales and production so that production schedules will be efficient. However, it is important that production managers are held accountable for production costs (i.e., by making them cost center managers). The production managers need incentives to keep cost low since they directly control these cost. This will also help the compensation of the salespeople.

However, it would not be appropriate for HF76 to include the *total*, and perhaps *actual* (as opposed to *standard*), expenses in the performance measure of the salespeople. Overhead and other expenses are out of the control of the salespeople. Unlike cost of production, these expenses are affected little by the sale of a product. Many of these costs are capital expenditure-related or other fixed costs. Measuring a salesperson's performance based on net profits would result in an inaccurate measure of their actual performance.

### **Recommendations**

Based on the above discussion of the HF76 proposed compensation plan, we recommend that changes be made to the plan in order to improve its effectiveness. The following paragraphs discuss the changes that should help the compensation plan align the objectives of the company with the actions of the employees. However, we recognize that these changes do not provide a panacea to solving all compensation plan problems.

As mentioned, the proposed new plan does not jive with management's objective to increase sales of high margin products. These margin percentages should be adjusted as previously described. This does not, however, solve the issue of how to deal with low or negative margin products. These products are important not for the profits they generate today but the potential profits from high margin services provided in the future. Certain products are sold because the maintenance, service, and replacement parts provide high returns that negate any losses made on the original sale. The compensation plan provides no incentives for employees to sell these products. The objectives of the low or negative margin products business are different from the rest of the business and cannot be integrated into the same compensation scheme without changes to the basis on which compensation is awarded for these products. For these products, commissions should be based not on the margins of the equipment sales but on the percentage of the expected margins for the future replacement parts. Presumably, the company has already forecasted this information in its product pricing process.

We have also determined that the 5% bonus is not significant enough to be effective in encouraging accurate sales forecasting. However, we do not recommend an increase in such a bonus as we disagree with it in principle. Since management wants accurate sales forecast but does not want to deter sales growth, the forecast-accuracy bonus should be eliminated. We do not recommend a direct penalty (loss of bonus) for sales beyond a target measure. Such a penalty would act as a disincentive to increase sales beyond that measure. The payout structure should integrate the incentive for meeting forecast instead of a separate bonus plan for meeting forecast. The proposed compensation plan should be modified so that the kink is less steep beyond 100% of the forecast. In other words, the commissions as a percentage of gross margins will be lower on each sale after the 100% annual forecast. In addition, the commissions will still not be paid until 70% of the forecast is achieved; however, the amount paid at that point will reflect the percentage of total gross margin dollars up to that point and will increase at the same percentage per unit up to the 100% mark (see Exhibit 1 for graphical illustration).

Because the highest percentage will be paid within the 70–100% range, but will be paid based on total dollars, the structure provides salespeople an incentive to be more "honest" in

their forecasts. Although this structure cannot completely prevent forecasting problems and sandbagging, it does not reward them. In addition, even though the decrease in payout percentage beyond the 100% mark may encourage myopic behavior, such as sales postponement, it will do so to a lesser degree than would a flat “cap” on commissions. This structure is our best compromise for balancing goals that are sometimes in conflict.

We also recommend that management become more involved in the forecasting process. In general, forecasting, (which provides the basis for budgeting) should remain a bottom-up process. The salespeople should be required to fully explain and document their forecasts. They should also be expected to explain any differences (or lack of differences) from historical forecasts. The 100% of gross margin should represent a stretch goal (i.e., it is difficult but not impossible to meet), while the 70% is a “minimum performance standard.” Setting the two goals will allow the compensation plan to motivate employees while rewarding those who truly perform well during a period.

For compensation purposes, the annual sales forecasts should not be updated during the period, even though they should be updated for production planning purposes. The static nature of the annual targets will encourage commitment to the target and will provoke salespersons to aggressively pursue new customers and new markets when existing conditions are not according to plan.

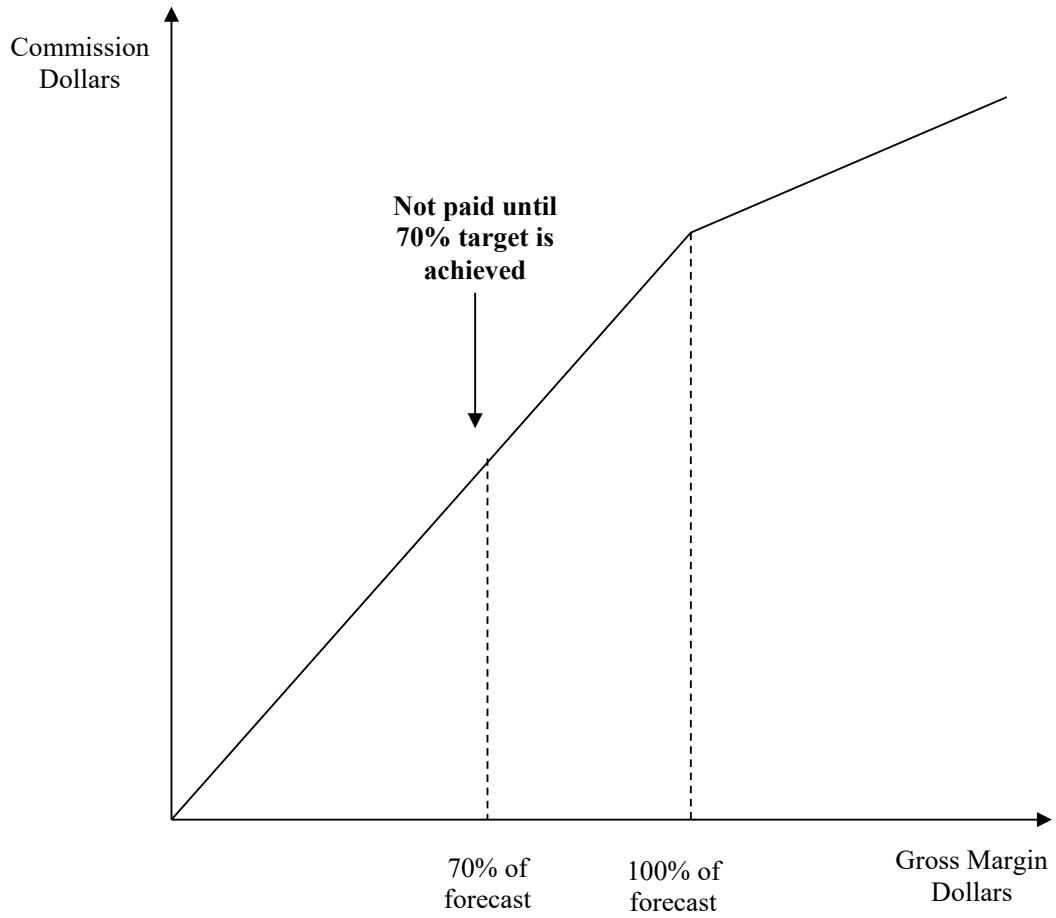
Our recommended plan should still pay out, on average, a higher salary to salespeople to encourage buy-in. The percentages should be adjusted to reflect this financial effect. We also recommend eliminating payments to salespeople made on shipments to their regions. The payments should be made to the salesperson that made the sale.

### ***Sales Assistants***

The final aspect of the new compensation plan that needs to be modified is the bonuses for sales assistants. Sales assistants provide administrative support for the salespeople. Although they provide value to the company, sales assistants are not directly responsible for sales, gross margins, or even corporate performance. There is no link between the bonus and the performance of sales assistant. The case provides an example of a sales assistant, Eva Colton, who received a bonus. She neither expected nor understood why she received the bonus. This bonus plan provides little incentive or motivation for sales assistants to improve their performance. It should be replaced by a bonus plan that rewards assistants for accomplishing goals that they can be held accountable for. The bonus should be based on efficiency of their administrative skills like typing, computer skills, and other sales support activities. Managers should measure these skills (some perhaps just subjectively) and reward based on sales assistants performance in these areas.

### Exhibit 1

#### Recommended Compensation Structure





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## **Witsky and Associates, Inc.**

### **Teaching Note**

#### ***Purpose of Case***

This vignette illustrates a type of ethical issue that is becoming more common—use of technology to provide very tight control over employees. Here, the specific device used is a search of an employee’s cell phone location records. The same issues can arise with the use of cameras or counts of keystrokes. What determines whether the use of these intrusive control mechanisms is ethically acceptable?

#### ***Suggested Assignment Questions***

1. Is it ethical for Witsky and Associates, Inc. to monitor the whereabouts of their employees using location tracking software in situations like that described in the case?
2. Would your answer about the ethics of using location-tracking software change if the situation involved personnel in Witsky’s human resources department checking to see if James was having an extra-marital affair?

#### ***Case Analysis***

##### ***Question 1***

The answer to Question 1 should be analyzed using a structure process, such as the 7-step process described in the text.

1. Identify the key facts
  - a. Who? Staff consultant and his superiors.
  - b. What? Lied about doing time-and-motion study procedures.
  - c. How? Made up the findings based on information he had found on the Internet.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using the Witsky and Associates, Inc. case (A215-07).*

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- d. When? During the job.
- e. Where? Small consulting firm. Client in Riverside, CA.
- f. Why? He was way behind in his work.

2. Define the ethical issue

Stakeholders:

- James
- Witsky and Associates, Inc. and its employees
- The client.

3. Identify major principles, rules, and values.

Ideally this would be done in terms of more than one ethical model. Here all of the models that are the possibilities:

- a. Utilitarianism—What Brayton did is serious. Lying to clients cuts to the heart of Witsky's reputation. Billing for work that was not done is stealing. The possibility of the report being wrong could cause the client great harm. The benefits of heading off problems of these types would seem to outweigh any of the out-of-pocket costs of using the cell phone records.
- b. Rights and duties. The client has a right to get what they pay for, so Witsky has the duty to do the work. However, does Brayton have a right to privacy? If so, then Witsky has an obligation not to violate that right. When rights conflict, which take precedence?
- c. Justice/fairness. Fairness to the client, to Witsky, to Brayton.
- d. Virtues, Brayton did not act with integrity. What are the virtues that Witsky should live up to? Honesty? Trust of employees?

4. Specify the alternatives.

Use the cell phone records, or not?

5. Compare values and alternatives. See if clear decision.

The issue is whether Witsky should have searched Brayton's cell phone records. In the absence of the complaint from the client, they would not have done a search and might not have found the problem. Should they routinely search cell phone records and compare locations with time-spent records to discover problems where they exist? After the client complaint, could they have done their investigation without resorting to a search of cell phone records?

6. Assess the consequences.

The short- and long-term consequences to Witsky of not discovering the problem would be severe. However, using the cell phone records of employees can be seen as violation of the employees' right to privacy. Some people would not want to work for Witsky because of this.

7. Make a decision.

Witsky should probably inform employees that cell phone location records might be searched under certain specified conditions. The employees would have to give consent.

An alternative conclusion might be that Witsky should not search cell phone records at all. They should not require that employees have the location-tracking application turned on. In this case, when confronted with the evidence provided by the client, Brayton might confess, and Witsky could solve the problem without any questions about invasion of privacy.

**Question 2**

What's different about the scenario presented in Question 2? The potential issue here—an extra-marital affair—is not specifically job-related. This kind of search seems even more intrusive than the base scenario described in the case. However, the extra-marital affair could be indicative of the employee's character. How far can employees go in invading the privacy of their employees? If they shouldn't use the location-tracking information for control purposes, would it be all right to hire a private detective to monitor the employees' whereabouts? Students can make up their own minds about these issues, and it is highly unlikely that all will agree. However, the case will get students thinking about ethics and ethical analyses.

## The Platinum Pointe Land Deal

### Teaching Note

#### *Purpose of Case*

This case illustrates an elaborate pre-action review, a proposal to buy a significant piece of land on which to build homes. Students can study and critique this “capital budgeting-like” analysis, and they will probably conclude that the process is, in general, quite well thought out. However, the case also adds a twist that illustrates how soft these forecasts about the future can be. The division manager is contemplating adding “a little optimism” to improve the likelihood that this project will get funded. This twist can also be used to motivate an ethical discussion.

#### *Suggested Assignment Questions*

1. Evaluate Robinson Brothers Homes’ land acquisition process. What suggestions do you have for improving it, if any?
2. If Harry Hepburn adds “a little optimism” to his projections, is he acting unethically?

#### *Case Analysis*

The homebuilding company described in the case, Robinson Brothers Homes (RBH), spends considerable effort in preparing formal land acquisition proposals. The proposals examine the proposed building project from every angle, including housing development type, construction challenges and costs, marketing prospects, and environmental concerns. The proposals are quite detailed, sometimes over 100 pages in length.

The proposals are prepared in great detail for two reasons. First, buying land of the right type at the right price is key to RBH’s success. Land provides a critical element of raw material

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*This note was prepared by Professor Kenneth A. Merchant for the sole purpose of aiding classroom instructors in the use of The Platinum Pointe Land Deal case. It provides analysis and questions that are intended to present alternative approaches to deepening students’ comprehension of business issues and energizing classroom discussion.*

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for the company. RBH needs to have several years' worth of good land secured to assure smooth continuity of operations. Moreover, land is a major cost element.

Second, and this is not described in the case, the proposals are prepared in great detail to enable the recruitment of a joint venture partner. RBH seeks joint venture partners for most of their projects. They do so both to raise capital and to limit the company's risk on any given project. However, perhaps even more important, they recruit joint venture partners to obviate the need to consolidate the project into their financial statements. The joint venture partner takes a (barely) controlling interest in the project. Then under the rules of FASB Interpretation No. 46 (Consolidation of Variable Interest Entities) (commonly referred to as "FIN 46"), RBH can account for the project using the equity method, keeping the debt off the balance sheet.

The case is not written to allow for a discussion of the details of FIN 46 and its application to the homebuilding industry, but it is an interesting tangent that instructors can go down if they are so inclined. FIN 46 was developed in response to companies' use of off-balance-sheet entities like Enron's famous "special purpose enterprises." However, homebuilding industry executives do not think that FIN 46 was clearly thought out for application in their industry. For example, many homebuilders buy options on land purchases by paying a nonrefundable deposit. Under FIN 46, they must create a variable interest entity (VIE) and, as the VIE's "primary beneficiary," they must consolidate the entity's financial data in their own financial statements. This consolidation can cause major distortions in the financial statements. The amount placed on the balance sheet as "minority interest from inventory not owned" can be 10 or more times the amount the company has at risk in land-option deposits. These distortions can easily cause violations of the homebuilders' loan covenants.

An important part of the land acquisition proposal process is the discounted cash flow (DCF) analysis, a summary of which is provided at the end of case Exhibit 3. The project is projected to provide an unleveraged return of 21.0%.<sup>1</sup> This is below the internal rate of return (IRR) for projects with this risk profile. The company sometimes funds projects with a "negative variance" from the required IRR, but a 3.5% variance is quite high.

It is useful spending some time discussing the origin of the IRR requirements, which are described in case Exhibit 2. This particular scheme is unique to RBH, but all homebuilders use something similar. Finance theory tells us that projects with higher risk should promise higher returns. RBH's procedure requires the identification of risk in four areas: political, development, market, and financial/financing. The risk of each project in each of these four areas must be rated as low, moderate, or high. The table at the bottom of Exhibit 2 shows how the ratings translate into a project IRR requirement. The logic built into this procedure comes from RBH's executives' many years of experience in reviewing land deals. However, it is somewhat arbitrary. Why, for example, does high political risk lead to an 8% IRR requirement, while high financing risk leads only to a 6% IRR requirement?

The risk rating procedure is inherently subjective. After preparing the detailed verbiage in the proposal, the managers subjectively assign the low/moderate/high rating. Obviously these categories blur together. Shading the ratings up or down by just one category can affect a project's IRR requirements by as much as 5%.

Similarly, the project cash flow forecasts themselves are subjective. The managers preparing the forecasts must make judgments about both the size and the timing of the cash

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<sup>1</sup> Because the company would be funding much of the project with debt, the projected leveraged return is 41.4%.

flows. The difference between being pessimistic and optimistic in these forecasts can affect the projected project IRR easily by several percentage points.

RBH's top executives have some control over the preparation of these projections. They have many years of experience in the industry, and they can make their own judgments about the projects' prospects. Moreover, they know the managers who are preparing the projections. They know the managers' strengths and weaknesses and their propensities to be pessimistic or optimistic. Overall, it is probably fair to conclude that the RBH system is effective. That makes this case an "anatomy" case. The goal of the class should be to understand what the company does and why it does it.

### ***The Ethical Question***

Harry Hepburn's contemplation of the addition of "a little optimism" to his projections adds an ethical issue to the case. The discussion of this question can be organized using the same multi-step method used for the other ethical discussions.

Determine the facts:

Who, what, where, when, and how:

- The key actor is Harry Hepburn, one of RBH's division presidents.
- The homebuilding market is starting to turn down. To sell its houses, Harry's division has had to cut its margins. It is not going to achieve its 2006 sales and profit plans. A downsizing is being recommended by top management for 2007.
- The Platinum Pointe deal is a large one that would bring in considerable revenue and profits in the 2008–2011 time periods.
- However, the Platinum Pointe deal does not promise returns that meet RBH's required risk-adjusted returns. Therefore, Harry is considering preparing projections that are "a little optimistic" to ensure that the project is approved.

Define the ethical issues:

Stakeholders:     Harry Hepburn  
                          Division personnel  
                          RBH top management  
                          RBH stockholders  
                          RBH's joint venture partner

Major ethical principles:

1. Greatest good for the greatest number of people
2. Fairness
3. Duties and obligations (e.g., right to know, good work situation)

4. Virtues (e.g., integrity, honesty)

Ethical issues:

The interesting feature of playing games with forecasts is that no lying is involved. There is no fraud, and there is no distortion of material facts. What Harry is thinking about doing is just altering his apparently historical approach to forecasts, which was probably to provide best-guess or conservative estimates, to help ensure that this project gets funded. However, still there is an ethical issue here. In utilitarian terms, some of the stakeholders might benefit while others are harmed or put at risk. In other terms, perhaps Harry is failing to fulfill a basic obligation, such as that to disclose the degree of optimism in the forecasts, or is acting in a less than virtuous way.

Decision alternatives and their probable consequences:

1. **Harry submits the forecast as planned.** Harry can argue forcefully that the project is in the best long-term interest of RBH but, presumably, this argument will fail. It will be difficult to sell a project with such a large negative variance to top management. Even if Harry could do that, it might be difficult to find a joint venture partner to fund such a large, risky project with inadequate returns. Thus, it is likely that the project will be rejected, and the division will be downsized.
2. **Harry makes the forecast more optimistic.** While top management probably has good long-term control over land acquisition decisions, it might be difficult for them to detect Harry's deviation in optimism in this one case unless they are quite familiar with the specifics of this location. Thus, they will likely approve the project. Similarly, it is likely that a joint venture partner could be located. With the project funded, a division layoff could be averted. However, if the project earned only the returns initially forecast, the division and RBH might have to lower revenue and profit targets in the 2008–2011 time periods. RBH might lose credibility with the joint venture partner, adversely affecting future financing options. On the other hand, forecasts are inherently risky, so the extra optimism that Harry put into the proposal might never be detected.

By this point in the discussion, or even earlier, some students will have begun to state their ethical position. For example, they may say that this is standard practice or that this is deceptive. The instructor should ask students to stick to the analysis and defer their conclusions.

Compare the alternatives with the ethical principles and choose the best alternative:

One good way to approach the ethical issue is to discuss the ethical merits of the alternatives one model at a time. If objective observers use a utilitarian lens, what conclusion would they draw? What if they use a fairness lens?, and so on . The models will not necessarily all lead to the same conclusion.

At the end, the instructor can let the students use whatever model(s) they think are best. Take a vote. It is likely that the vote will not be unanimous. That is fine, as there is no one right ethical conclusion. However, learning will have occurred as the students expand their ethical judgment skills.

## **Pedagogy**

This case can be used just with the focus on control of investments in land, which is critical in this industry, or with a primary focus on the ethics of the manipulation of the forecasts that is being contemplated. The class approach will vary widely depending on the instructor's focus. The ordering presented in this teaching note is logical if both issues are to be discussed in class.



University of Southern California

Marshall School of Business

Leventhal School of Accounting

## EyeOn Pharmaceuticals, Inc.

### Teaching Note

#### *Purpose of Case*

The EyeOn Pharmaceuticals, Inc. case was written to illustrate a control system in one of the most difficult control settings—a research laboratory. Control in this setting is difficult because the use of *action controls* is sharply constrained; in most cases, the individuals being controlled know more about the desirability of the actions they are taking than do their superiors. In addition, *results controls* have limited effectiveness. It is often 15 (or more) years before the company reaps the rewards of its investments and, hence, knows for sure whether the actions taken have produced good or bad results. Thus, to a large extent, managers of research laboratories must rely on *personnel controls*, which consist at least partially of hiring good people and placing them in a productive work environment.

The case provides some detail on the work that takes place at each of the stages of product development, the probabilities of success at each stage, the interim measures of performance (e.g., research publications), and the incentives, which are provided to the R&D personnel. Students are led to conclude that the corporation is probably doing nearly all it can to ensure good control. It tries to hire good people and keep the management team informed of the progress and prospects of each project.

#### *Suggested Assignment Questions*

A simple set of suggested questions is as follows:

1. How would you characterize the control strategy used in the research and development area of EyeOn Pharmaceuticals?
2. Evaluate the control strategy. What, if anything, would you suggest EyeOn managers do differently?

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using the EyeOn Pharmaceuticals, Inc. case (A216-04).*

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I have also used this case as the basis for an examination with this more detailed set of questions:

1. Evaluate the control environment and control system at EyeOn Pharmaceuticals, Inc. What are the strengths, weaknesses, and dangers inherent in the control systems?
2. What changes, if any, would you suggest to Mr. DeMartino and Dr. Kumar? How would your suggestions improve control at EyeOn Laboratories? Specifically address the concerns of Mr. DeMartino as they relate to the planning, budgeting, measurement, and reporting processes that are used.
3. How can the productivity of research and development be measured?
4. On what basis should EyeOn's board of directors evaluate the management of EyeOn Pharmaceuticals?

### **Case Analysis and Pedagogy**

It is useful to start the class first by having the students characterize what they know of the company's business strategy in terms of either its critical success factors (CSFs) or key recurring decisions (KRDs). Certainly among the critical success factors are the following:

- Develop new products. These products should be salable and, hopefully, unique (breakthrough products). This development provides the company with its competitive advantage.
- Productive use of resources (money and time).

Among the key recurring decision/actions are:

- How much to spend on R&D
- How to allocate R&D resources
- How to use resources effectively:
  - fast accomplishments (time is important)
  - little or no waste (overspending, waste time, work on dead-end projects)

If EyeOn effectively controls all its important CSFs or KRDs well, it is likely to be successful.

What is unique about this control environment?

- very long lags between investment/activities and start of payoff
- low chance of success on any one project
- payoff unpredictable:
  - breakthrough

- size of market
- competitive response
- people (research-oriented)
  - not business oriented
  - non-conformists
  - creative
  - intelligent
  - but can be lazy/cavalier

What control problems does EyeOn face?

1. **Lack of direction.** Do scientists forget that profit is the raison d'être? (Probably sometimes.)
2. **Lack of motivation.** Are the scientists lazy? (Probably sometimes.)
3. **Behavioral limitations.** Are some scientists not smart enough or not creative enough? (Undoubtedly, but up front it's hard to tell which ones.)

EyeOn's control system consists of a number of elements:

1. Planning and budgeting (annual process). (I find it useful to diagram this process over time to show both that it is primarily a top-down process and that it is quite compact, taking only two months.)
2. Budget analyses (quarterly)
3. Cost reports
  - project
  - program
  - medical specialty
  - cost center
4. "Achievements"
5. Incentive plans
  - scientists
  - managers

In the evaluation, this control system should be related back to the CSFs or the KRDS. Do these controls effectively address the CSFs or KRDS? I think students can make any of a number of useful observations, including the following:

1. The cost reports are not very important. Would it be cost effective to cut the frequency and detail of these reports?

2. Should EyeOn allow for more bottom-up input into its resource allocation?

Here is an old, but illustrative example: At Merck, until 1985, the R&D chief signed off on all resource allocation decisions himself, and he tracked the work of all the key scientists. This centralized system slowed decision-making, stifled creativity, and drove out some of the best researchers. Merck moved to a system that allowed each unit more autonomy. Project teams took the compounds from discovery through marketing. Team members were included in a new stock option program if they reached their milestones.<sup>1</sup>

3. Should there be a stronger link between scientists' personal objectives and incentives? Salary increase only?

The opening quote in the case highlights the importance of being able to measure R&D productivity. How can EyeOn measure productivity which is, generally, outputs divided by inputs?

1. Some students will conclude that it is impossible or that it is counterproductive because such measurement might cause a shift to minor modifications instead of major breakthroughs.
2. Some imperfect measurements can be suggested, such as:
  - percent of projects tabled (as a negative indicator of performance)
  - percent of projects reaching each stage of development:
    - on-time
    - on budget
  - R&D as percent of sales vs. competitors
3. Productivity is clearly easier to measure for projects in later stages of development. EyeOn can see which technical milestones have been met and at what costs. If budgets are revised to reflect scope/timing changes approved by management, productivity can be assessed by tracking the achievement of milestones and performance vs. budget. Total company productivity can be the aggregate performance over all projects.

I like to raise an important and interesting accounting issue in the following way: U.S. accounting principles require the expensing of all R&D expenditures. Capitalizing and amortizing these expenditures would provide a better matching of revenues and expenses. Suppose EyeOn decided for internal management purposes to capitalize R&D expenditures. Would that help or hurt the company's ability to control R&D?

1. The danger with capitalizing is that sins can be covered, resulting in big write-offs later (possibly after the guilty parties have moved on to other jobs).
2. Auditors would have to make evaluations every period as to whether intangible (research-in-progress) assets had future value.
3. This accounting policy might increase total R&D spending because managers would not have to take an immediate hit to profits.

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<sup>1</sup> J. Weber, "Merck Needs More Gold from the White Coats," *Business Week* (March 18, 1991), p. 102.

For a conclusion, I like to highlight to students that R&D operations provide an example of the toughest type of control situation. Managers cannot measure results well (on a timely basis) because of the long lag between the time of investment and the eventual financial returns, if any. All the measures up until the time of eventual commercial success are unreliable. In addition, the managers cannot use action controls well because of their lack of complete knowledge of the desirable actions. Thus, to a large extent, they must rely on personnel controls.

The incentives are used primarily to help remind scientists about what aspects of performance are most important. They provide some motivation; and they can be used to shape the organizational culture in beneficial ways.

## **Axeon N.V.**

### **Teaching Note**

#### ***Purpose of Case***

The Axeon N.V. case was written to illustrate the effects of a management control system and the supporting management processes on one specific, major decision in a decentralized, multinational corporation. The situation, which is real, but disguised, illustrates the real-world application of many management accounting concepts, including incremental cost analysis, capital budgeting, sensitivity analysis, and transfer pricing. However, perhaps more importantly, the case is about managing the cost/benefit trade-offs that are inherent in a decentralized firm. The case illustrates some common management process problems involving conflict between a parent and its foreign subsidiary. Visible in the case are common attributes of managerial behavior in a decentralized organization. The attributes are both positive (motivation, initiative) and negative (suboptimization, parochialism, indecisiveness). Dealing with these behaviors forces students to consider issues about organization design and control system administration.

Because of the breadth of issues raised, this is an excellent review case. Many students will become emotionally engaged in the situation and, hence, the case becomes a good vehicle for discussing the advantages and disadvantages of decentralization and the problems faced in administering a control system in a decentralized environment.

#### ***Suggested Assignment Questions***

1. Is construction of the new factory in the UK in the best interest of Axeon N.V.?
2. Ignoring your answer to Question 1, if the plant were not built and AR-42 was shipped from the Netherlands to the UK, what transfer price would be appropriate?
3. What should Mr. van Leuven do?

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*Professors Kenneth A. Merchant, Wim A. Van der Stede, and research assistant Xiaoling (Clara) Chen wrote this teaching note as an aid for instructors using the Axeon N.V. case.*

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## Case Analysis

### A. Product Sourcing Alternatives

Despite the existence of many relevant data in the case, the answer to the first assignment question is not an easy one. There are two alternatives for producing AR-42: UK and Netherlands.

The best place to start is with the discounted cash flow analysis, a summary of which is presented in Exhibit 2 of the case. Case Exhibits 3–5 provide back-up detail. The analysis is straightforward, and it presents no computational difficulties. The new-factory project shows a positive net present value using an 8% rate, which seems to be the marginal borrowing rate for Hollandsworth in the UK. Moreover, the project shows a 15% IRR, which is above Axeon's 12% hurdle rate. Therefore, based on these analyses, the project looks worthwhile.

Was there anything wrong with this initial analysis? The analysis looks sophisticated, and most students will instantly empathize with Mr. Wallingford. However, criticisms can be made of his analysis:

1. The end-of-project recovery value of equipment and working capital is a surrogate for the cash flows after the end of seven years. It is likely that this is biased downward. Why would all sales and profits stop after that date? Is there no learning that has come from this project? Does the project have no option value?
2. Wallingford might well have presented some sensitivity analyses, reflecting more pessimistic forecasts. These might have headed off some of the criticism that came later from Axeon's director of sales.
3. Most importantly, although he appears to be taking a corporate perspective and, hence, comes across as an appealing character with whom most MBA students will identify, Wallingford is really parochial. He did not consider the investment opportunity using a corporate-focused perspective. Wallingford is indignant about Axeon managers' rejection of his idea, but he is not as innocent as he portrays himself. The main defect in his analysis was his failure to consider the alternative of manufacturing in the Netherlands. The main missing information in his original proposal was this *implicit benchmark*.

Wallingford might also have proposed a two-step approach to selling AR-42 in the UK. He could have demonstrated the size of the UK market using imports from the Netherlands, and then later proposed to save the shipping and duty costs by manufacturing in the UK. Instead, he chose the more self-centered approach of going it alone from day 1. Why didn't Wallingford present this alternative? Probably because he wanted to run his own plant (build his own empire).

Therefore, we see in the case that the Dutch managers argue that producing the AR-42 in the Netherlands is an even better alternative than that proposed by Mr. Wallingford. Some of their arguments question some of the numbers in the Hollandsworth analysis. The Axeon director of sales (Mr. De Rijcke) questioned the sales forecasts. However, who understands the UK market better, the local general manager or the functional specialist in a foreign country?

The Axeon director of manufacturing (Mr. Oosterling) questioned both the UK facility's ability to handle the manufacturing and the cost assumptions. Students should think about his statements regarding costs. The fixed costs are already sunk, so they are not relevant

to the analysis. The analysis of the variable costs (as shown in Exhibit 6 of the case) is misleading. As shown in Exhibit TN-1, an average variable cost of £1860 on the full 1000 tons of production implies an incremental variable cost of £1800 on the additional 400 tons for UK sales. This incremental variable cost is the relevant cost when comparing the two investment proposals. Therefore, Mr. Oosterling has overstated his case.

Next the instructor can turn to the discounted cash flow comparisons. Exhibit TN-2 shows an analysis of the Netherlands proposal. The revised analysis still favors the Netherlands proposal, mainly due to the much greater initial investments for the UK proposal.

	<u>UK Proposal</u>	<u>Netherlands Proposal</u>
Net Present Value @ 8%	£916,000	£1,288,790
Internal Rate of Return	20%	26%

In addition, taking into account the higher risks involved in the UK startup relative to the Netherlands expansion, the UK hurdle rate should be higher, which makes the Netherlands alternative even more attractive.

On the other hand, sensitivity analyses would show that the UK managers could face significant sales shortfalls and manufacturing problems and still have a project with a positive net present value. In terms of that criterion, or even the Axeon 12% hurdle rate criterion, perhaps the impact of the startup complications are not as significant as the Axeon functional managers believe them to be.

Further, the irrelevance of the fixed costs in the Netherlands proposal makes sense only if the Netherlands has, and will always have, excess capacity for producing AR-42. In other words, the assumption of zero opportunity cost of the fixed plant is valid only if the Netherlands capacity is greatly overbuilt. If this is the case, it suggests problems with Netherlands capacity planning in the past. The longer the time horizon, the better the UK proposal looks.

Other issues such as nationalism and perceived autonomy are also important. Axeon N.V. is increasingly embracing a philosophy of decentralization. Therefore, even if the UK proposal is not optimal, forcing manufacturing of AR-42 in the Netherlands will undercut the perceived decentralization in the company. Another consideration is the nationalistic sentiments of the English. This is suggested by the requirement of a majority of local directors for the Hollandsworth board and the threatened resignation of Mr. Nobel. An increase in duties on AR-42 is likely if the UK viewed Axeon as exploiting the UK market from the Netherlands.

Finally, Mr. Wallingford is known to be enthusiastic and innovative. If he feels that he has less autonomy than before and all the benefits go to the Netherlands, his enthusiasm and innovative spirit are bound to suffer. He might be less committed to developing the AR-42 market in the UK. Moreover, based on his outstanding performance at Axeon, opportunities for Mr. Wallingford to leave Axeon for a competitor are probably abundant. Can Axeon afford to lose him?

### **B. Why Did Mr. van Leuven Behave as He Did?**

It is easy to be critical of Mr. van Leuven in this case. He caused much of the problem because he did not manage the process very well. He should learn that in some situations he should refrain from comment when he is exposed to early-stage proposals at board meetings. His early encouragement in this situation, which he subsequently reversed, caused much of the

disappointment from the Hollandsworth personnel. Mr. van Leuven was also representing Axeon at the Hollandsworth board meeting. Ideally, he should have proposed the alternative of sourcing from the Netherlands early in the decision-making process. Much of Mr. van Leuven's behavior in the case was designed to find a way out of a problem that he probably knew he had caused.

### C. The Transfer Pricing Issue

If the AR-42 for the UK is sourced from the UK, then the analysis is complete. However, if AR-42 is supplied from the Netherlands to the UK, then a transfer price must be established. There are a number of transfer pricing possibilities:

1. **Market price.** This would award most of the "profit" to the producer, in this case the Netherlands.
2. **Cost, or cost plus a mark-up.** Cost can be defined anywhere from incremental variable cost to full cost, and the mark-up can be variable (a fixed amount per unit) or a lump sum (to compensate the Netherlands for costs of the increased working capital and the use of their capacity).
3. **A two-book system.** This would involve crediting the Netherlands at market price but charging the UK only the variable cost. This would make both divisions happy, presumably, but it would lead to a double counting of profits and require a corporate elimination.

In many decentralized companies, managers would allow the division managers to negotiate a fair transfer price. However, in this case, because of the friction already generated between personnel in the UK and the Netherlands, negotiation may not be possible. Therefore, here Mr. van Leuven probably has to choose a transfer pricing method and a means of implementing his decision.

The total contribution per ton of AR-42 is as follows (using figures from year two and following):

Selling price	£3,700
Variable costs	(1,800)
Shipping	(100)
Duty	<u>(100)</u>
Contribution per ton	£1,700

Each transfer pricing method allocates this contribution between the UK and the Netherlands.

What transfer pricing/profit sharing arrangement is best? There is no correct solution. Transfer prices provide one way of shaping managerial behavior. If centralized production is deemed to be the strategic focus, then a transfer price giving more of the profits to the Netherlands will best signal this emphasis. However, if top management wants to reward local market sensitivity and initiative, then a transfer price that passes most of the profits on to the UK is best. A thoughtful analysis of the transfer pricing issue will lead to a discussion of broader strategic questions.



#### D. "Fit" Between Strategy, Organization Structure, and Control Systems

At this point in the class discussion, it is useful for the instructor to ask the following question: What is Axeon's corporate strategy? Can you tell from the case what the key success factors are for Axeon?

The case does not provide much information about Axeon's critical success factors. What is most critical for Axeon—identifying new applications and markets or producing at low cost? The case does not provide a clear answer to this question. However, one thing that is clear is the trend in Axeon's international expansion and in its organizational structure. **Exhibit TN-3** illustrates this trend. Axeon used to have a centralized, functional organization structure, but the firm is moving to greater decentralization to take advantage of geographical expertise in each of the areas in which it operates.

Should the company's critical success factor(s) affect decisions about organization structure and management control systems? Clearly yes. This observation can lead naturally into a discussion of the pros and cons of decentralization vs. centralization. Generally speaking, the advantages of centralization include economies of scale and technically skilled employees. On the other hand, decentralization leads to better relationships with local governments, sensitivity to the local market, and local managers' higher perceived autonomy. **Exhibit TN-3** summarizes the trade-off between flexibility and efficiency as the level of decentralization increases. Two points are worth noting:

- 1) Market sensitivity is enhanced with increased decentralization. In addition, a decentralized manufacturing firm with a larger number of smaller facilities enables greater production flexibility.
- 2) Economies of scale decrease with increased levels of decentralization. This is because a decentralized organization loses the cost savings from shared management overhead and larger, more efficient plants.

In summary, Axeon is facing two sets of pressures:

	Centralization Strategy	Decentralization Strategy
Key success factor	Low cost	New product applications
Key function	Production	Marketing
Responsibility Centers:		
Production	Investment center	Cost center (captive)
Marketing	Revenue center	Profit/Investment center

To some extent, Axeon's control system is a compromise between full decentralization, which would use highly autonomous local investment centers, and full centralization, which would have the local organizations be only marketing outposts, revenue centers.

We also see in the case that the current reward system includes a bonus based entirely on the local division results. This seems to reinforce the decentralization strategy. Alternatively, even under a decentralization strategy, a bonus might be based partly on company-wide profits to promote cooperation between divisional managers. A reward system can reinforce a chosen strategy as well as compensate for the weaknesses of the chosen strategy.

Therefore, Axeon seems to be gradually embracing decentralization. Both the line and the staff organizations have significant power (decision rights). The friction we see in the case is typical of a matrix organization where country managers like Wallingford are often at odds with functional specialists at headquarters. Mr. van Leuven has to play an integrator role. He should smooth over the rough spots that will inevitably arise.

### **E. What Should Mr. van Leuven Do?**

There is no correct solution here; there are only pros and cons. The options are to source in the UK, source in the Netherlands, or delay. Delay means possibly source in the UK after the viability of the market has been demonstrated. Asking students to vote as to their preference will reveal significant differences in opinion. This vote, if one is taken, should come very late in the class.

While it appears that the economics of this decision favor the Netherlands, our own take is that the decision in this case should probably favor the UK. If a decentralized organization structure is appropriate for Axeon, as it appears to be, then decentralization must be allowed to work. Motivate the local managers to take initiative, and reward them for taking that initiative. The Hollandsworth proposal exceeds the established hurdles, so allow Hollandsworth managers to proceed with their plan. If students recommend the seemingly superior economic choice of sourcing the production, then they should just be made to understand the negative motivational effects that choice will have on the motivation of the UK managers, and possibly even their successors.

Longer-term, Axeon might try to implement a more sophisticated analytical procedure so that the right alternatives are properly addressed in proposals such as that analyzed here.

### **What Happened?**

In the real-world situation, the Hollandsworth project was rejected. The transfer price was set at £3700, so the full cost to Hollandsworth (including shipping and duty) was £3900. Initially, Hollandsworth managers tried to sell AR-42 at a price of £4500 per ton, but the volume sold was miniscule. Eight months later they lowered the price to £4200. The annualized rate of sales went to 150 tons, and Hollandsworth managers thought that the potential was there for annual sales of 200 tons at that price. Four months later they lowered the price to £3700. The annualized rate of sales went to 270 tons. With this result, the Hollandsworth managers thought that they had clearly demonstrated the potential for annual sales of 400 tons at that price.

Axeon began an increased push to sell AR-42 in other parts of the world. Quickly they filled the capacity of the plant in the Netherlands. Hollandsworth eventually got permission to build a plant in the UK.

Mr. Wallingford did not leave the Hollandsworth immediately. Instead, he focused on other issues and continued to be a highly successful manager. Some years later, Mr. van Leuven was promoted. Mr. Wallingford was offered Mr. van Leuven's job, but he turned it down because he wanted his children to be educated in the UK. Soon after having made that decision, he was offered a position of managing director of a larger UK company and he accepted that offer.

## **Student Takeaways**

Students can learn a lot from this case. They can practice their technical skills, such as those required to do net present value analyses, and they can apply their transfer pricing theories to a real world-like situation. But perhaps most importantly, by seeing that what appears to be a good investment is not made and understanding why not, students can see that the process of management is more intriguing and more complicated than it usually appears in textbooks.

## **Pedagogy**

Many students see this case as difficult. Sound amount of floundering with the numbers is useful, but if the floundering continues, instructors should be prepared to step in and help clarify the analysis. That understanding is essential before moving on to the more qualitative aspects of the case. Suggested timing in a 75-minute class is as follows:

- 40 min.*      The plant investment decision
  - 15 min.*      Transfer pricing alternatives and behavioral effects
  - 15 min.*      The fit between the existing control system and the company's strategic priorities
  - 5 min.*        What happened/summary
- 75 minutes

### Exhibit TN-1

#### Relevant Cost Analysis

**Calculation of incremental variable cost per ton of manufacturing AR-42 in the Netherlands for shipment to the UK:**

Projected average variable cost in the Netherlands at 1000 tons	£1,860
Projected total variable cost in the Netherlands at 1000 tons	£1,860,000
Projected average variable cost in the Netherlands at 600 tons	£1,900
Projected total variable cost in the Netherlands at 600 tons	£1,140,000
Additional variable cost to produce 400 tons for UK	
$(£1,860,000 - £1,140,000)$	£720,000
Incremental variable cost to produce 400 tons for UK	
$(£720,000 / 400)$	<u>£1,800</u>

**Revised variable cost per ton (Different from Exhibit 6):**

Incremental manufacturing variable cost	£1,800
Shipping from Netherlands to UK	100
UK import duty	<u>100</u>
Total variable cost per ton	<u>£2,000</u>
Total variable cost, 400 tons to UK	<u>£800,000</u>

**Exhibit TN-2**

**Discounted Cash Flow Analysis—Netherlands Proposal**

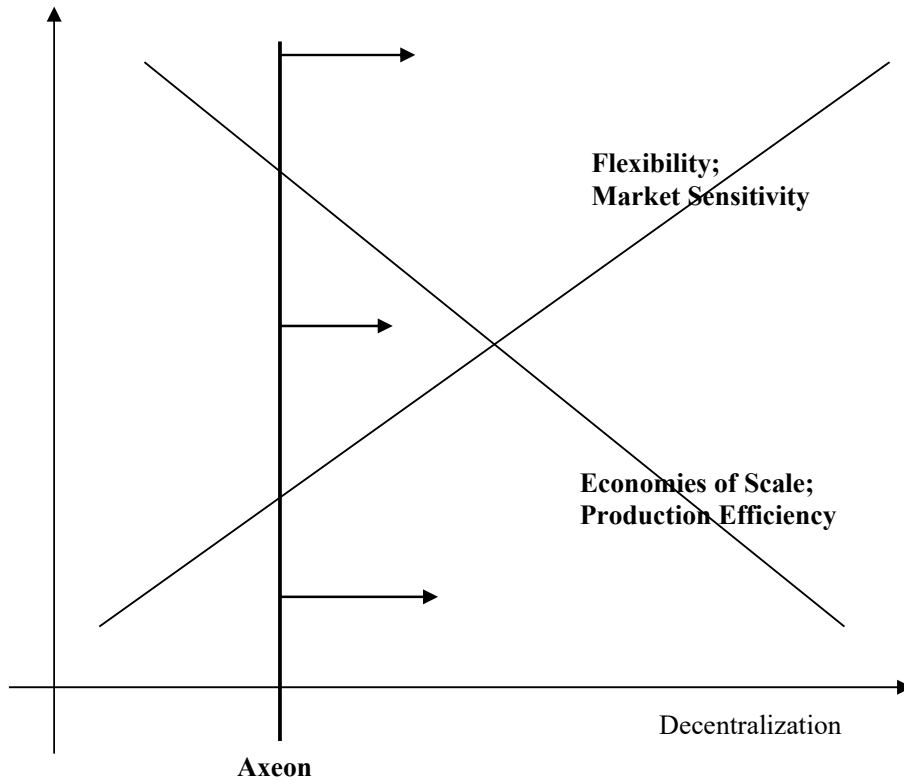
(Figures in rows (2)–(4) in £; row (1) and rows (6)–(9) in £000)

	<b>Year</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
(1)	Working capital	-120	-20	-20					160
(2)	Sales price per ton		4,000	3,700	3,700	3,700	3,700	3,700	3,700
(3)	Incremental cost per ton		2,000	2,000	2,000	2,000	2,000	2,000	2,000
(4)	Contribution per ton (2) – (3)		2,000	1,700	1,700	1,700	1,700	1,700	1,700
(5)	Sales (in tons)		200	300	400	400	400	400	400
(6)	Total contribution (4) × (5)		400	510	680	680	680	680	680
(7)	Promotion costs		260	150	100	100	100	100	100
(8)	Tax 40% of (6)–(7)		56	144	232	232	232	232	232
(9)	Net cash flow after tax (1) + (6) – (7) – (8)	-120	64	196	348	348	348	348	508

Net Present Value at 8%	£1,288,790
Payback Period	1½ years
Internal Rate of Return	26%

**Exhibit TN-3**

**Flexibility and Efficiency as a Function of the Level of Decentralization**



## Controls at the Bellagio Casino Resort

### Teaching Note

#### ***Purpose of Case***

The Controls at the Bellagio Casino Resort case was designed with several purposes in mind. First, it illustrates a control system that is dominated by action and personnel controls, rather than results controls. The analysis of this system leads to insights about some of the factors that limit the feasibility of results controls.

Second, the case can lead into a discussion of what is meant by the term “tight control.” The case presents an excellent example of the application of tight action controls in the table games areas of the casino.

Finally, the case can lead into a discussion of the meaning of what auditors refer to as “internal control,” which is a subset of the broader area of management control. The case describes an excellent system of controls over cash and cash-equivalent stocks and movements thereof. These controls, which fall in the category of internal controls, are necessary but not sufficient to guarantee good management control.

#### ***Suggested Assignment Questions***

Since the case can be used for several purposes, the assignment can be slanted in several ways. The following is one list of questions that might be used:

1. Focus on three key roles at mainly three levels of authority in the casino—blackjack dealers, pit bosses, and the vice president of table games. How would you characterize the “control strategy” (e.g., tight vs. loose) used over each of these roles?

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Controls at the Bellagio Casino Resort case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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2. Prepare a list of the controls described in the case. What control problems are they designed to address? Are the managers interviewed for the case justified in being proud of their company's control system? Why or why not?
3. Are any of the control systems in place at the Bellagio suitable for firms in other industries?

## Case Analysis

### Key Roles and Controls

We suggest starting the class by analyzing each of the organizational roles and the controls over them. (This addresses *Suggested Assignment Question 1*.) Start with the lowest level role described in the case—blackjack dealer—and build the chart shown in **Attachment TN-1** on the blackboard.<sup>1</sup> (Some students are not familiar with the blackjack game, so some discussion of how it works and what the dealer is expected to do may be necessary.) One point that comes out of this chart is that results controls are not important at the dealer and pit boss levels.

One major categorization of control systems is tight or loose. Asking students whether control over the dealers is tight or loose will invariably lead to an answer of tight. Labeling any control system as tight or loose will lead to a discussion of what it means to have tight control. Our definition is that tight controls provide a high degree of certainty that the person(s) being controlled will act as the organization wishes. This is a judgment call, but we believe that the Bellagio certainly has tight control over dealers and pit bosses. However, because they do not use action controls and do not have good performance measures, they do not have tight controls over the vice president of table games.

A minor point that is interesting here is whether control was enhanced by the high salaries the casino paid to line personnel, particularly dealers. The argument would be that well-paid employees would be less inclined to get involved in illegal activities. The managers we spoke with, however, said no! They believed that they could not pay anyone enough money to remove the temptation provided by the large sums of cash present on the casino floor.

### Evaluation of Controls

The evaluation of the sets of controls in use has to be based on some consideration of what can go wrong. (This addresses *Suggested Assignment Question 2*.) A provisional, but not exhaustive, list of things that can go wrong at the blackjack tables is presented in **Attachment TN-2**. Ask the students to build such a list (supplemented by items on the list shown where necessary) and think about whether the controls in place were sufficient to reduce the incidence of each undesirable activity to a reasonably low level.

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<sup>1</sup> As mentioned in the case, the levels of casino management above the pit bosses, such as shift managers and the vice president of table games, did little direct supervision of the gaming activity. They were mainly involved in trouble shooting (e.g., resolving cases of malfeasance), keeping good customers happy, resolving special problems that arose (e.g., staffing issues), and improving the casino operations. Below the pit bosses, on the other hand, there is another level of supervision by so-called floor supervisors. However, to avoid over-structuring of the discussion, we recommend to essentially focus on three key roles or levels: dealers (front personnel), pit bosses (supervision), and vice president of table games (management).



After some discussion, instructors can summarize by stating that casino managers are aware of the risk of these problems (although new schemes are constantly being invented), and they have taken steps to reduce their incidence. As a consequence, the evaluation of the controls in place should be very favorable as long as cost constraints are kept in mind.

Another problem that casinos face is “skimming.” Skimming means that money is taken from the casino, such as cash from the cage or counting room often requiring cover through forged documentation and changed audit trails. This problem can be used to lead into a discussion of internal control and the ways in which cash is controlled in the casino. The two major purposes of internal controls are (1) to safeguard assets and (2) to ensure reliability of the financial records. In the area of cash, the casino maintains *imprest* cash balances to safeguard the cash and chips; this means assigning individual responsibility for a certain amount of money. Moreover, they have elaborate procedures to ensure that the financial records are reliable (e.g., multiple approvals of transactions, checking of audit trails, multiple reconciliations, and trend analyses), some of which are described in great detail in the case.

Do these procedures prevent skimming? The answer is a tentative yes. The controls are effective against skimming unless collusion is involved, which is a frequent limitation to internal controls.

### **Weakness of Results Controls**

As part of the discussion of *Suggested Assignment Question 2*, instructors should point out that results controls are not very important in the casino, and it is important to spend some time to understand why this is so. Results controls are simply not feasible for control over the dealers because results are not measured until the 24-hour drop procedure is complete, and during that period more than one dealer has worked at a table. It would be possible to measure dealer productivity by keeping track of deals per hour, but this is not done. Modern technology, such as RFID, actually would make this quite feasible, but the Bellagio management has so far decided against implementing such a system.

Instructors may wish to spend some time discussing the advantages and disadvantages of RFID technology that could be used to track deals. Beyond relatively easily quantifiable costs and benefits (e.g., the cost of replacing the chips vs. the benefit of being able to design better customer comp programs), however, the managers felt very strong about perhaps the most significant “hidden cost” of RFID, best expressed by the following quote from the case: “Having *too much* information—knowing to the penny who wins or loses how much—isn’t always the best for the customer. At some point, the customers might lose some entertainment value if we monitor every little thing that happens. Moreover, we’re not sure that we understand all the privacy implications of this just yet. What if the IRS comes to us and asks for this information? We are in the entertainment business, and so we shouldn’t do anything that diminishes customer enjoyment.”

Results can be measured for individual pits and, of course, the casino as a whole, and these measures could be used for control over pit bosses and casino managers. However, even those results controls are not used because they are not considered good indicators of the desirability of actions taken. One key indicator is the *hold* percentage (*win/drop*), but as is discussed in the case, this is a flawed measure. Even if the *handle* could be measured instead of the *drop*, the *hold* ratio would not be a reliable indicator of the desirability of the actions of the person being controlled because of statistical variations. On any given day, week or even month, poor results might be blamed on a “high roller on a hot streak.”

As an illustration of the limitations of the results measures, instructors can refer to Exhibit 12, which indicates rather large drop variances across the 24 blackjack tables listed (from negative 28.52% to positive 37.71%). Drop is a measure of the gambling activity at the tables, but negative drop variances cannot be taken to mean that the dealers were not productive. The drop is dependent on the table's minimum and the number and type of players who chose to play at that table on that shift. To illustrate, ask if the drop results for Table 19 (variance percentage of -28.52) suggest that the dealers on that table that day were doing something poorly (e.g., slow dealing) or dishonestly (stealing money before it was put into the drop box)? If managers wanted to check the details of what happened at that table that day, they could examine a videotape of the action.

The results measures are more reliable the larger the increment of the casino being measured (e.g., an entire shift vs. a single table) and the longer the periods of time involved, hence the GCB's requirement to investigate on a monthly basis all statistical fluctuations by game type in excess of +/-5% resulting from the comparison of the previous calendar year to that of the current month. Reasons for the deviations could include the activity of customers whose play materially affected the results of the month (the so-called *high-roller-on-a-hot-streak* explanation); the effects of any changes to the rules, types of wagers, or game play procedures; the effect of any errors or mistakes made during the operation of the game during the month; the effect of any thefts or other improper acts by employees or patrons; or any other unusual occurrences during the month being reviewed.

Moreover, there is one other problem with the results measures that is mentioned in the case. Pit bosses and casino managers can resolve disputes by deciding in the casino's favor, thereby increasing the daily hold percentages. However, sometimes, up to reasonable limit, it is more profitable to decide in favor of the player because if they are kept happy, they will continue to play in the house. For the same reason, no bonuses were provided to managers on the basis of *win*, as Rudloff explains in the case: "We obviously don't want games where the win is *too high*, as that might jeopardize the enjoyment guests derive from gambling and coming into our casino in the first place." These are examples of a form of short-term vs. long-term trade-offs.

### **Applicability to Other Industries**

Are the controls observed at the Bellagio Casino applicable to other industries? (This addresses *Suggested Assignment Question 3*.) The casino industry is in some ways unique, but some of the principles included in the Bellagio control systems are of use in other firms. Tight security and good controls over movements of assets are necessary where valuable, liquid assets are involved (e.g., gold in semiconductor firms, money in banks). Moreover, personnel and action controls, such as those used in the casino, will dominate where good results measures are not available. Managers in each business and company have to go through the process described here of thinking what is wanted and what can go wrong and then designing a set of controls.

### **Pedagogy**

Our experience with this case suggests that the discussion should be relatively structured. A few students have never been in a casino and do not know how the game of blackjack works, and they may be reluctant to admit their lack of knowledge. As a consequence, the instructor should probably start class by asking a knowledgeable student to explain the basics of the games of blackjack and the layout of the tables and to act as an industry expert.

After the background information has been clarified, the discussion should proceed smoothly. The casino business intrigues most students, and the energy level of the class is generally high.

### Attachment TN-1: Analysis of Roles and Controls

Role	Key Actions	Controls	Evaluation (in light of things that can go wrong)
Blackjack dealer	<ul style="list-style-type: none"> <li>- Accurate, honest, deals</li> <li>- Productive</li> <li>- Cheerful</li> </ul>	<ul style="list-style-type: none"> <li>- Licensing (P)</li> <li>- Hiring (P)</li> <li>- Training (P)</li> <li>- Frequent rest breaks (P)</li> <li>- Supervision (A)</li> <li>- Surveillance (A)</li> <li>- Documentation (A)</li> <li>- Mystery shoppers (A)</li> </ul>	Good, tight control; some risks
Pit boss	<ul style="list-style-type: none"> <li>- Good supervision</li> <li>- Marketing (give comps to good customers)</li> </ul>	<ul style="list-style-type: none"> <li>- Licensing (P)</li> <li>- Hiring (P)</li> <li>- Promotion (P)</li> <li>- Training (P)</li> <li>- Documentation (A)</li> <li>- Surveillance (A)</li> </ul>	Good, tight control; have to (and probably can) trust these experienced people, given sufficient action controls, such as through creating transaction trails
Vice president of table games	Decisions: <ul style="list-style-type: none"> <li>• Hiring</li> <li>• Labor scheduling (when to open a pit)</li> <li>• When to change minimums</li> <li>• Casino layout</li> </ul>	<ul style="list-style-type: none"> <li>- Licensing (P)</li> <li>- Hiring (P)</li> <li>- MBO/bonus system (R)</li> </ul>	Loose control

Code:

R = results control

A = action control

P = Personnel control

### **Attachment TN-2: Things That Can Go Wrong at a Blackjack Table**

1. Dealer overpayment, when bets are paid or change made.
2. Dealer payoff of a losing bet.
3. Player peeking at dealer's card or dealer signaling (showing the card).
4. Player "past posting" (i.e., adding a bet to hand that looks promising) or "copping" (i.e., decreasing a bet on a hand that looks lost).
5. Dealers stealing chips. Dealers have discovered many devious ways to remove chips from the tables. Common schemes have been to "cup" chips in their hands or slip them into "subs," such as elaborate hairdo, false bandages, or hidden pockets in their apron.
6. Players counting cards. Skilled blackjack players can keep track of the aces and face cards that have been played and gain an advantage in their betting.
7. Players introducing counterfeit money or chips.
8. Pit bosses granting bad credit. (The casinos protect themselves by having this decision made by personnel in the cashier's cage. Communication to the tables is done through computer terminals.)
9. Players stealing chips from each other (commonly by having an accomplice to create a diversion).
10. Players marking or switching cards.



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NEALE O'CONNOR

## **PCL: A Breakdown in the Enforcement of Management Control**

### **Teaching Note**

#### **Synopsis**

PCL is a leading European consumer electronics, lifestyle, and healthcare company that has been operating in the Chinese market since 1995. While its consumer electronics business has grown quickly in China, it has discovered that the costs of returned goods in its TV division equal 5% of its sales. Even more worrying is that 37% of the products returned have been of good quality and have been returned without good reason. PCL has set up taskforces to study and remedy the situation and has uncovered a more serious problem within the organization. Control measures designed to handle returns have simply not been executed by its staff and third-party after-sales service centers. What can PCL do to ensure enforcement of company policies in the future?

#### **Conceptual Foundation and Teaching Objectives**

This case explores how conflicting interests within an organization can affect its profitability, and the importance of proper execution of internal control mechanisms.

The teaching objectives of the case are:

1. To explore the importance of internal control.
2. To explore the importance of monitoring internal control mechanisms.
3. To explore the people factor in a control system, including customer education, salesperson capability, goal congruence, and incentives.

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*Grace Loo prepared this teaching note under the supervision of Prof. Neale O'Connor as a guideline to teaching: "PCL: A Breakdown in the Enforcement of Management Control".*

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### **Suggested Student Assignments**

1. Analyze the challenges faced by PCL in reducing returned sets and NFF returns.
2. Aside from the recommendations put forth by PCL, what other actions might improve the return rate of TV sets?
3. What lessons can PCL draw from its exercise in controlling the high rate of returned TV sets to inform its execution of internal control mechanisms in the future?

### **Potential Teaching Approach and Strategy Analysis**

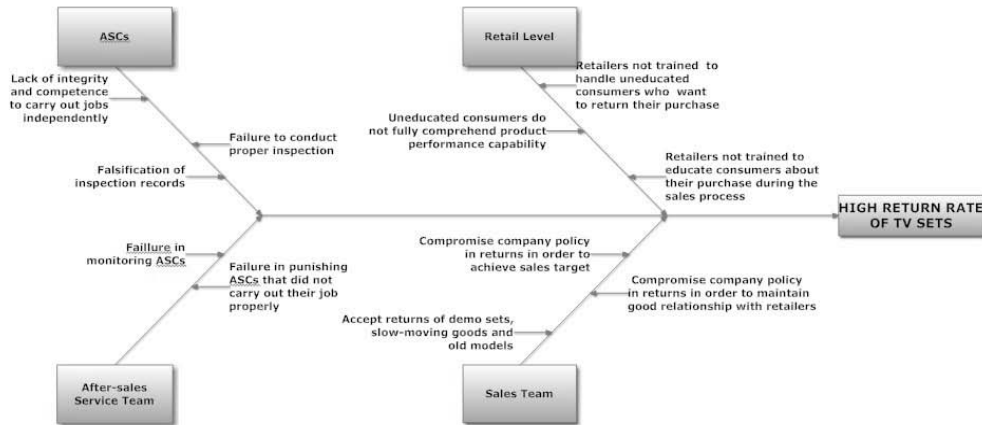
A sound internal control system helps an organization to achieve its goals and meet profitability targets. It also helps to ensure truthful managerial reporting, compliance with organizational policies and plans, and reduction of risks. The failure of PCL in controlling the return of TV sets reflects a breakdown in its control system. The high rate of returns and NFF returns and the numerous contributing factors are summarized in the table below:

**Table 1: Factors Contributing to the High Rate of TV Returns**

<b>Function</b>	<b>Problems</b>
Retail	<ul style="list-style-type: none"> <li>• Customers not informed about what constitutes a legitimate reason for return.</li> <li>• Retailers and ASCs not trained in handling uninformed customers.</li> </ul>
Sales Team	<ul style="list-style-type: none"> <li>• Conflict of interest for the sales team with regard to achieving sales targets and handling returns of slow-moving models.</li> <li>• Policy for handling returns of slow-moving models and demo sets not enforced.</li> </ul>
ASCs	<ul style="list-style-type: none"> <li>• ASCs have not been trained and managed sufficiently to enforce inspection of returns.</li> <li>• Falsification of inspection records by ASCs implies lack of integrity.</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Failure of the management to control and punish the falsification of inspection records.</li> <li>• Lack of a clear policy for handling the return of old models.</li> <li>• Ineffective reporting structure, with the after-sales service team reporting to the general manager rather than the TV division.</li> </ul>

The fishbone diagram below captures the root causes:

**Figure 1: Causes of the High Rate of TV Returns**



It appears that a majority of the return issues faced by PCL are people-oriented. Even when there are established policies in place, the sales team and ASCs fail to execute them properly. Implementation of internal control mechanisms involves people, and the mechanisms as well as their goals must be communicated to staff across the different functions within the organization. Incentives and penalties can help to motivate staff to execute the processes and meet the objectives of control mechanisms.

## **Recommendations for PCL**

### **Customer Education**

In a developing market such as China, educating customers is an important part of the marketing process. If customers consistently return TV sets because they are dissatisfied with the quality of cable reception they receive at home compared to the high-definition reception they see in the shop, PCL should work with retailers to start educating customers about this. Retailers can educate customers during the sales process or when they demand returns or exchanges. This would require PCL to educate the retailers in handling customers' returns. PCL also needs to train the ASCs in educating retailers about what constitute legitimate and illegitimate returns, as they act as a gatekeeper in the return process. Both scenarios incur administrative costs and PCL has to decide whether the costs of training retailers and educating consumers will outweigh the loss from returned TV sets.

### **Training for the Sales Team**

All company policies and plans are carried out by people and are effective only to the extent that the staff has the capability to execute them successfully. PCL appears to have serious problems in getting its personnel to enforce its policies. Although the demo sets and slow-moving models cannot be returned, salespeople sabotage this company policy by agreeing to accept such returns to maintain good relationships with dealers. While the pressure on the sales team is understandable, it is up to PCL's management to guide its salespeople to enforce its

policies consistently until the dealers come to accept PCL's policy on returns. PCL should help its salespeople by providing them with training in how to handle such sensitive situations. PCL may also want to reassess whether its sales targets are realistic based on the ability of its salespeople to push sales without compromising company policy.

### ***Structural Problem***

The failure of the ASCs to inspect returned sets properly and their falsification of inspection records suggest serious problems in the control environment of PCL. Structurally, the after-sales service team is responsible for overseeing the ASCs, but the after-sales team does not report to the TV division. Rather, it reports to the general manager of PCL's sales division, who oversees numerous product categories. PCL may want to consider reorganizing such that the after-sales teams for the ASCs report directly to the TV division.

### ***Goal Congruence Problem***

Failure of the after-sales team to monitor and punish the ASCs for shoddy inspections and false inspection records is another reflection of PCL's enforcement problem. PCL should consider organizing training programs to improve the integrity and competence of its after-sales team. The quality of staff varies widely across China, and it is obvious that many ASC personnel lack the integrity to carry out their jobs independently.

### ***Enforcement of Internal Control Mechanisms***

A number of lessons about enforcing internal control mechanisms can be drawn from PCL's exercise in reducing its high rate of TV returns:

#### ***Incentives***

PCL's sales team compromises on the company's return policy when faced with a high sales target. If the taskforce had taken a broader view and taken into consideration other initiatives of the company, it may have been able to foresee the problem faced by the sales team. Different initiatives within a company must be coordinated to avoid conflicting efforts resulting in difficulties in execution. For an internal control system to be successful, its objectives must be linked with the day-to-day objectives of those who have to carry them out.

#### ***Sense of Ownership***

Those who are responsible for executing control mechanisms need to feel a sense of ownership of the internal control processes. It appears that the bonus and penalty systems created for the ASCs and sales team are helpful in achieving this aim.

#### ***Clear Guidelines***

The situation with the return of TV sets has clearly improved since the second taskforce drew up criteria for accepting returns of defective TV sets and old models. This shows that clear guidelines and criteria are critical to ensuring that staff members execute company policies.



## **Philip Anderson**

### **Teaching Note**

#### ***Purpose of Case***

This case illustrates a common control system dysfunctional side-effect—incentives-caused conflicts of interest faced by brokers in the retail brokerage industry. Sometimes brokers are torn between serving their clients' and their firms' best interests. This case can be taught from the perspective of Philip Anderson, the branch manager, which makes it an ethics case. Does Philip have an ethical obligation to serve his clients' interests to the best of his ability, even at some cost to his firm and, presumably, himself? The ethics discussion can also be continued at both the firm and industry levels of analysis. What should financial service firms' stance be in situations like this? Do they want brokers to maximize long-term profits even if that does not serve their client base optimally? Are brokers more like professional advisors or salespeople?

The case can also be taught as a control case. Not serving the client optimally is a dysfunctional side-effect that can have negative long-term consequences for the firm. How should managers in the firm address conflicts of interest like this?

#### ***Suggested Assignment Questions***

To make the conflict of interest more tangible, it is probably best to give the students a specific scenario to discuss. The case can then serve as a backdrop to this discussion. Here is such a scenario:

Assume that one of Philip's clients is a married man, aged 36 with two young children, who wishes to reallocate a significant portion of his retirement funds that are

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Philip Anderson case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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currently invested in certificates of deposit. Philip recommends a growth investment, and he identifies the three representative possibilities shown in Table A.

**Table A**  
**Three Investment Alternatives**

	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>
Investment	Growth fund from a large investment company	Growth fund from Stuart & Co.	Exchange-traded fund
Load or commission	None	5% front-end	3% to purchase; 3% to sell
Average annual total returns over last five years (including management fees)	10.73%	10.62%	11.01%
Risk	Moderate	Moderate	Moderate
Management fees	0.4%	1.2%	---

Questions:

1. Which investment alternative:
  - a. Provides the highest returns to the client?
  - b. Provides the highest profits to Stuart & Co.?
2. If your answer to (b) is not the same as your answer to (a) and Philip recommends the highest profit choice, is he acting unethically? Why or why not?
3. Which alternative should the top management of Stuart & Co. want Philip to recommend to his client? Is the company's control system designed to ensure that choice?

### **Case Analysis**

The conflict in this case is obvious to most students. Philip, the branch manager of the Phoenix branch of Stuart & Co., a retail brokerage, is rewarded for meeting a set of goals that presumably serve his firm's interests. The measures taken into consideration at the branch level include:

- Branch profits
- Branch revenues
- New clients
- Number of margin accounts
- Balances in margin accounts

- Number of ties with each customer (i.e., selling of multiple product lines)
- Ratio of in-house to outside product sales
- Sales of equity issues syndicated or underwritten by Stuart & Co.

The case is not specific as to how these various factors are weighted in performance evaluations but it does indicate that Philip has been given specific performance targets. If he fails to achieve these targets regularly, Philip will face some repercussions, such as lower salary increases, lower promotion prospects, and even loss of job.

Stuart & Co.'s formal bonus plan for branch managers seems to be defined more narrowly. It is based on branch revenues, growth in number of ties of relationships developed with each customer, and the number of business referrals to other branches.

Conflicts arise when Philip and his team feel pressure to push products that are particularly lucrative for the firm on customers for whom other alternatives would be preferable. This type of conflict is common in the brokerage industry, but it also occurs in other industries. For example, some firms in the mortgage industry provide extra incentives to brokers who are able to steer customers into higher-rate loans. Some of these practices, such as failure to disclose and/or explain certain fees or options, are illegal. In January 2006, Ameriquest Mortgage Co., the United States' largest home lender to people with bad credit, was forced to pay \$325million to settle a case brought by regulators alleging deceptive lending practices. However, many laws are not specific about what practices are prohibited. Thus, in many cases, these conflicts between customer service and short-term self-interest persist. Many companies have to take a stand and define the ways in which they want their employees to behave. Indeed, in the press release from Ameriquest announcing their settlement with regulators, the company CEO said, "Doing the right thing for the people we serve has always been one of our core values." He blamed the problem on a few cases where company employees did not live up to the company's ideals.

### **The Ethics Issue**

The ethics of this situation can be analyzed using the multistep method described in the chapter. (Some of the steps have been combined in this teaching note.)

Determine the facts:

Among the facts that should be brought out are:

- Alternative A is probably the best investment choice for the client. C might be superior if the client holds onto the asset for many years because its return has, historically, been higher than A's. However, it will take many years of superior returns to pay for the broker's buy and sell commissions. B is an inferior choice.
- B provides the highest short- and long-term profits to Stuart & Co. The 5% commission is earned immediately, and the management fees provide an annuity that is earned over time. The broker and firm earn nothing from directing the client to A. This choice does allow them to maintain contact with the client. If the client is sophisticated, then he might perceive the good, inexpensive service that the firm is providing him. This could increase trust and loyalty and lead to sales of other products in the future, but there is no guarantee this would happen.

- Could the client identify these (and other) investment alternatives, and will the client perceive that A is the best choice? Presumably not because he has sought Philip's professional advice.
- Philip is merely an advisor. The client will make the final investment decision. However, Philip can affect the decision by showing the client more or fewer investment alternatives and facts about each alternative.
- Clearly, Philip has to abide by the laws to which he is subject. However, it is not illegal to fail to disclose all the investment alternatives to a client. He can probably easily satisfy the disclosure requirements by sending investment prospectuses to the client even when it is unlikely that clients will not read them or not understand them if they try to read them.

Define the ethical issues:

Stakeholders: Philip  
The client  
Stuart & Co. and its stockholders  
Stakeholders for the other investment company and the exchange-traded fund

Major ethical principles:

1. Greatest good for the greatest number of people
2. Fairness
3. Rights and duties and obligations
4. Virtues (e.g., integrity, honesty)

Ethical issues:

Here, clearly the client's financial well-being is at risk. The primary competing interests in this situation are the client's right to good professional advice vs. the rights of Philip and Stuart & Co. to earn profits. Does Philip have an ethical obligation to do what is best for the client, even if that alternative provides little, or even no, profits to the firm? Or does Philip serve a role more like a salesman who has the right, or even the obligation, to push his own firm's products in pursuit of his own self-interest and that of his firm?

Utilitarianism does not help to address this issue. This is a zero-sum situation. If the client makes an inferior investment decision, the client suffers, and a number of people, including Philip and Stuart & Co.'s managers and shareholders benefit.

However, the other ethical models—fairness, duties and obligations, and virtues—can be applied here. In fact, all of these ethical words and concepts are visible in professional codes of conduct to which many stock brokers belong. For example, the Code of Conduct of the Stockbrokers Association of Australia can be found at [www.stockbrokers.org.au/About-Us/Codes](http://www.stockbrokers.org.au/About-Us/Codes), but this is just an example.

Such codes specifically mention virtues such as honesty, integrity, and fairness. They mention the ideals of avoiding conflicts of interest and placing clients' interests above their own. But such codes are a weak form of control. Not all brokers are members of such organizations, and the associations' control even over their members tends to be weak.

There is even some question as to whether stock brokers are professionals. Consider this quote:

The financial services industry spends huge sums each year—more than \$700 million [in the U.S. alone] on magazine advertising alone—to persuade investors that they provide professional advice. The reality is that Wall Street is not in the business of providing objective, professional advice. Actually, Wall Street is in the manufacturing business. Like any other manufacturing business, the objective is to develop products that will sell, and so the firms hire salespeople to “move the products.” (D. Wheeler, “Tools of the Trade: House of Games,” *Investment Advisor*, October 2004.)

(This ethical issue can be discussed at the individual, the firm, and/or the industry level of analysis.)

Decision alternatives and their probable consequences:

The extremes of the decision alternatives are as follows:

1. Philip does his best to identify the best investment alternative(s) for the client and to inform the client about those alternatives.
2. Philip identifies the investment alternative that provides maximum revenues and profits for his branch and his firm and pushes his client to choose that alternative.

There is a full range of alternatives between these extremes. For example, Philip could direct the client to a compromise choice, one that was a reasonable choice for the client while providing a reasonable profit for Stuart & Co.

Choose the best alternative:

Students should evaluate the alternatives and their consequences and select the alternative that best fits their primary principles or values. Take a vote. It is not necessary for all students to agree. Examine the rationales for the students' different positions.

### **The Control System Issue**

If this case is used to focus on the company's control system, the first part of the discussion should focus on causes of the conflicts of interest that people like Philip face. The basic cause is the company's incentive systems. Not surprisingly, they pressure company personnel to generate revenues and profits.

Once managers understand how they want the branch managers and brokers to behave, then they can decide how to design a control system to ensure the proper behaviors. The controls that need to be tailored to the situation include:

- Incentive system design. Should brokers be evaluated in terms of client satisfaction? Or, to protect against the possibility that clients do not know what is best for them, should an

independent expert review board evaluate the advice given in a sample of situations for each broker?

- Training
- Policies and procedures
- Codes of conduct
- Hiring policies

### ***Pedagogy***

The case discussion can be done with the entire class or with small groups. This teaching note lays out a reasonable strategy for discussing the case with a large group.

If the class is broken into small groups, have each group analyze the case and reach a conclusion about the ethical situation. Then bring the groups together and see if they agree. Then the control system design issue can be discussed with the larger group.



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## Sunshine Fashion: Fraud, Theft, and Misbehavior among Employees

### Teaching Note

#### *Synopsis*

Shenzhen-based Sunshine Fashion Co. Ltd (“Sunshine”) is a Sino-Japanese venture that has grown from mere original equipment manufacturing (“OEM”) of cashmere sweaters for export to include retailing, with a chain of more than 220 retail points throughout China. In order to manage its retail operations, it has set up both regional and branch offices to handle stock and to support and monitor its retail points. It has installed an ERP system for tracking its goods and monitoring sales. The implementation of the ERP system has improved the situation. For example, the system has helped Sunshine to manage its domestic business considerably through reliable and consistent reporting by retail points and branch offices. Nonetheless, fraudulent behavior among employees has cost the retail chain the equivalent of almost 5% of its domestic sales. What more can the management do to control such behavior and reduce the company’s loss?

#### *Conceptual Foundation and Teaching Objectives*

This case examines some of the fraudulent behavior among employees at a retail chain in China and explores the issue of management control. It also explores some of the conditions unique to the Chinese market that foster fraudulent behavior. This case also provides an opportunity for students to learn about the COSO framework for internal control.<sup>1</sup>

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<sup>1</sup> COSO (1992) “Internal Control—Integrated Framework,” Committee of Sponsoring Organizations of the Treadway Organization, <http://www.coso.org/IC-IntegratedFramework-summary.htm> (accessed 27 June 2010).

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*Grace Loo prepared this teaching note under the supervision of Professor Neale O’Connor as a guideline to teaching: “Sunshine Fashion: Fraud, Theft and Misbehaviour among Employees”.*

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The teaching objectives of the case are:

1. To provide students with a basic understanding of how the absence of appropriate control mechanisms can impact a business.
2. To explore the importance of personal ethical integrity within a commercial organization.
3. To explore the challenges of running a retail operations in China's developing market.

### **Suggested Student Assignments**

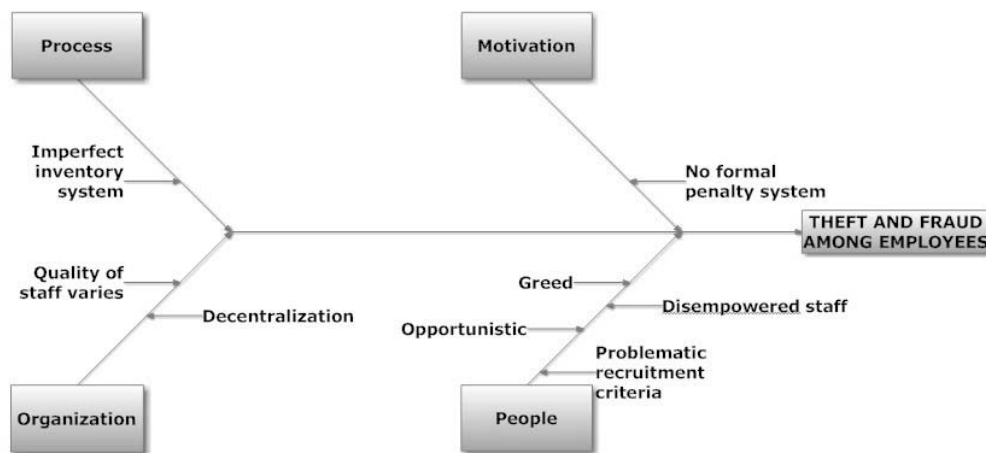
1. What are the root causes of misbehavior among Sunshine's employees?
2. Analyze the internal control system of Sunshine's retail operations. What are its strengths and weaknesses?
3. What kinds of actions are recommended for Sunshine in response to the fraudulent behavior in its retail operations?
4. In what order would you implement the recommended actions for Sunshine?

### **Analysis**

#### **1. What are the root causes of misbehavior among Sunshine's employees?**

The root causes of misbehavior among Sunshine's employees are summarized in the fishbone diagram below:

**Figure 1: Causes of Misbehavior at Sunshine**





**2. Analyze the internal control system of Sunshine's retail operations. What are its strengths and weaknesses?**

**Internal Control System**

Viewed in light of the COSO framework for financial processes, internal control can be seen as a system of processes and procedures that help the management of an organization to ensure that its management objectives are met. Examples of such management objectives include operational effectiveness and efficiency, reliable financial reporting, and legal and regulatory compliance.

The COSO framework identifies five elements of internal control systems:

- **Control environment:** The control environment is determined by the integrity and competence of the members of an organization and is also influenced by the style of the management. It provides an invisible foundation for all control processes within the organization.
- **Risk assessment:** The identification and assessment of risks is the precursor to the creation of internal control processes. It allows the management to determine where and how control mechanisms are to be implemented.
- **Control activities:** Control activities are processes and procedures that enable the management to monitor and measure the use of organizational resources in achieving management objectives. Some examples of control activities are financial reporting, authorizations and performance reviews.
- **Information and communication:** Critical information must be communicated in a form that not only enables organizational members to carry out their jobs but also keeps managers aware of and responsive to emerging problems. At the same time, it is the management's responsibility to communicate to all organizational members what their roles in the internal control system are and how each one's work relates to the work of coworkers. Employees also need communication channels to report to the management any problems or market changes they observe.
- **Monitoring:** Regular monitoring and assessment of internal control systems ensures that the system is working and being continuously perfected.

The five elements of the COSO internal control framework form an integrated system that can become "built in" to the business operation, providing information to the management and enabling them to respond quickly to emerging problems and market changes.

**Sunshine's Internal Control System**

The following table summarizes the strengths and weaknesses of Sunshine's internal control system using the COSO framework.

**Table 1: Strengths and Weaknesses of Sunshine's Internal Control System**

COSO Element	Strengths	Weaknesses
Control Environment	The ERP system facilitates a transparent flow of information that helps with internal control.	<ul style="list-style-type: none"> <li>• <i>Guanxi</i> is critical in China for brands to get into department stores, but Sunshine's practice of hiring branch managers based on their relationships with department stores at the expense of management capability, leadership and integrity appears to be causing damage to its retail operations.</li> <li>• Inability to control branch managers who cheat the company allows them to set a bad example that will affect the morale and loyalty of the staff.</li> </ul>
Risk Assessment	The ERP system provides accurate and timely information that helps Sunshine to control its inventory and track goods.	Sunshine's ERP system provides the head office with updated sales information, but not stock information, thus opening the way for staff to continue cheating.
Control Activities	<ul style="list-style-type: none"> <li>• Tagging each sweater shipped from its warehouse with a barcode and price, which are scanned into the system, enables Sunshine to track each item.</li> <li>• By having the branch offices return all unsold goods at the end of the season to the head office, where a team of 12 counts the returned stock and compares it with the record of pieces sold and inventory sent out to the branches, Sunshine is able to monitor for missing pieces.</li> <li>• Sunshine's ERP system provides the head office with updated point-of-sale information every four hours, allowing it to closely track the situation of different markets throughout the country.</li> <li>• Rotating the branch managers on a regular basis prevents them from building up too much power in a market.</li> </ul>	Sales and promotions are in part determined locally by department stores, and Sunshine has no mechanisms for controlling fraudulent behavior arising from such an arrangement because it does not know when the sales and promotions are going to take place or how much of a discount is to be given.

Information and Communication	<ul style="list-style-type: none"> <li>• Having the company boss visit department stores to build up personal relationships with them helps Sunshine to control its relationships with department stores.</li> <li>• Sunshine's accounting department visits branch offices twice a year to communicate with local offices.</li> </ul>	<ul style="list-style-type: none"> <li>• The ERP system does not provide updated and fine-grained information about stock levels at the different branch offices and retail points, opening the way for staff to cheat.</li> <li>• There are no confidential channels for staff to report misbehavior in a high power distance culture.</li> <li>• The management fails to communicate to the staff the seriousness of fraud and misbehavior.</li> </ul>
Monitoring	It is unclear from the case what kind of monitoring Sunshine performs with regard to its internal control mechanism.	Sunshine does not appear to have any system that makes use of the eyes and ears of its staff on the ground to help monitor internal misbehavior.

**3. What kinds of actions are recommended for Sunshine in response to the fraudulent behavior in its retail operations?**

Sunshine should explore ways to get updated information on the stock levels at different retail points and branch offices. It seems that branch offices and retail points require updated counts of their stock levels, even though the stock count changes every day. If Sunshine's ERP system cannot be upgraded to track stock levels and will only track stock data that are entered manually, then Sunshine should enforce penalties for staff who fail to input stock counts at the required times. Co-ordination is critical in a decentralized environment, and internal control systems work only when people, technology, and processes are connected.

One reason why branch managers have been able to engage in fraudulent behavior is because Sunshine does not totally control promotions and sales. Each department store has its own discount and promotion policy, and Sunshine's retail points in the department stores must follow the stores' policies. It is possible for Sunshine to negotiate with department stores such that the department stores inform Sunshine's head office about discounts and promotions, with the head office in turn informing the branch managers to carry them out at the retail points. This is not a straightforward communication route, and such a policy also incurs administrative costs, but it gives Sunshine more control over discount sales.

While it is easy to say that Sunshine should raise its standards and hire branch managers who can bring their relationships with department stores to Sunshine or who have exceptional abilities in building relationships with department stores while at the same time demonstrating strong management and leadership skills and personal integrity, such candidates may be difficult to recruit in China. The fast-developing China market has bred an entrepreneurial and opportunistic mindset that is hard to govern in the absence of a fully developed legal framework for business or a culture of business ethics such as in the West. It is common for staff and managers to use commercial information they learn from their jobs to run their own businesses on the side, frequently fronted by their families and relatives and in direct competition with their employers' businesses. In addition, the quality of potential job candidates varies greatly throughout China, depending on development of the city in which a retail point is located. Nonetheless, Sunshine should continue to screen its candidates for managerial posts stringently, placing more emphasis on personal integrity and leadership skills, and submit them to background and character reference checks. Building an ethical culture in an organization is a

long-term endeavor, especially in a market environment such as China's, where many kinds of unethical behavior are taken as given. Nonetheless, Sunshine can start moving in that direction by organizing ethics training programs, creating channels for staff to report unethical behavior, and penalizing employees who engage in such behavior.

**4. *In what order should the recommended actions for Sunshine be implemented?***

It is suggested that the above recommendation be implemented in the following order:

- Setting up a penalty system for failure to report updated stock information
- Creating a channel for staff to report fraudulent behavior
- Negotiating with department stores regarding informing Sunshine's head office directly about promotions
- Organizing ethical training programs for staff.



**University of Southern California**

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A215-03 TN

## **Better Beauty, Inc.**

### **Teaching Note**

#### ***Purpose of Case***

The Better Beauty case (which describes a real, but disguised situation) was written to illustrate the functioning of a cost reduction program. Such programs are common in companies facing cost pressures and in recessionary times. The results of this cost reduction program did not turn out well, however, so the case became a “pathology” case. It illustrates the dysfunctional effects control systems in general, and cost reduction programs in particular, can produce.

This case has also proved to be effective as an exam case, using the questions shown in the assignment below (with importance weightings assigned as 40%, 20% and 40%, respectively).

#### ***Suggested Assignment Questions***

1. What is your appraisal of each part of the control systems in use at Better Beauty?
2. What is your appraisal of the cost reduction program in particular? Why have CIP/CAP projects begun to go sour?
3. What should Ted Williams (BBI’s president) do?

#### ***Discussion of Question 1 (Evaluation of Control System Elements)***

When I teach the class, I follow the ordering in the assignment questions. Before getting into the CIP/CAP programs, I like to have the students discuss the other elements of Better Beauty’s control system: long-range planning and budgeting system, performance reviews, capital budgets, and incentive compensation program.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using the Better Beauty, Inc. case.*

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I start by making sure students understand the company's strategy. Formerly it focused on selling prestige cosmetics and beauty products which, presumably, have high margins. However, the new strategy involved an expansion of the product line and a move to more mass marketing. With this strategy, cost efficiencies became much more important. The CIP/CAP programs are something they need to excel at.

Then I ask the students to describe the timing of the BBI planning processes, and I draw the diagram shown in Figure 1. Then we move into a description and evaluation of BBI's management systems. Here are points that can be made about each:

Long-range planning:

- Is done at the top only.
- Is informal.
- Is not communicated to lower-level participants.

Budgeting:

- Top-down target-setting.
- Are the targets unrealistic? (Who knows most about the business?)
- Is there commitment to the goals?
- Done too early?
- Is inexpensive.

Performance Reviews:

- Done monthly.
- Short-term oriented. Are managers postponing repairs and maintenance and investments to minimize monthly variances?
- Do the variances have anything to do with performance?
- Use of revised vs. original budget targets.

Capital Budgeting:

- What they have is a system.
- Looks at future cash flows.
- Based on payback (not NPV).
- No consideration of risk.
- Two-year payback is very short-term oriented.

- Guidelines are very conservative. Produce a harvest strategy. (Cost reductions emphasized.)
- Is there/could there be fudging of the numbers?
- Timing—middle of the budget cycle.
- Forms are easy to complete.
- Only one meeting per year.

Incentives:

- Only to director level. Why not lower-level?
- Bonus pool is based on percentage of corporate net income. What if a manager does well but the corporation does not?
- Bonus committee politics? (Too much subjectivity?)
- Managers don't know what bonuses are based on:
  - Subjective;
  - But reduces tendency to play games.
- Bonus potential: Director—10% of salary; VP—20%—too small?
- No incentive to cooperate.
- No cost reduction target.
- Timing—payment in January. (This is good.)

**Discussion of Question 2 (CIP/CAP Programs)**

Regarding the CIP/CAP programs, the following points should come out:

- Goal is for 5% of total cost of goods sold. The goal is linear, not exponential, based on cumulative volume, as learning-curve theory suggests is proper.
- CIP/CAP has one-year payback. Very short-term oriented.
- They had early successes but later failures. It appears the early wins were easy (low hanging fruit). Not so anymore. From the company standpoint, the interesting question is: When should you stop cost reduction programs? When do they become counterproductive? How do you know?
- In the early years, the managers just achieved their goals. Never went over. Gameplaying?
- CIP/CAPs are not linked with bonuses. Should have bonus for *overachieving*.

Specifically regarding the A-53 program, students should discuss the causes of the delays, the quality control problem, the R&D/production implementation problems, and the pressure to take credit for savings without adequate study.

### ***Discussion of Question 3 (What should Ted Williams do?)***

Students will come up with many good ideas. These could come up in discussions of Questions 1 and 2, or they can be deferred to the end. Wherever, students can usefully address the following:

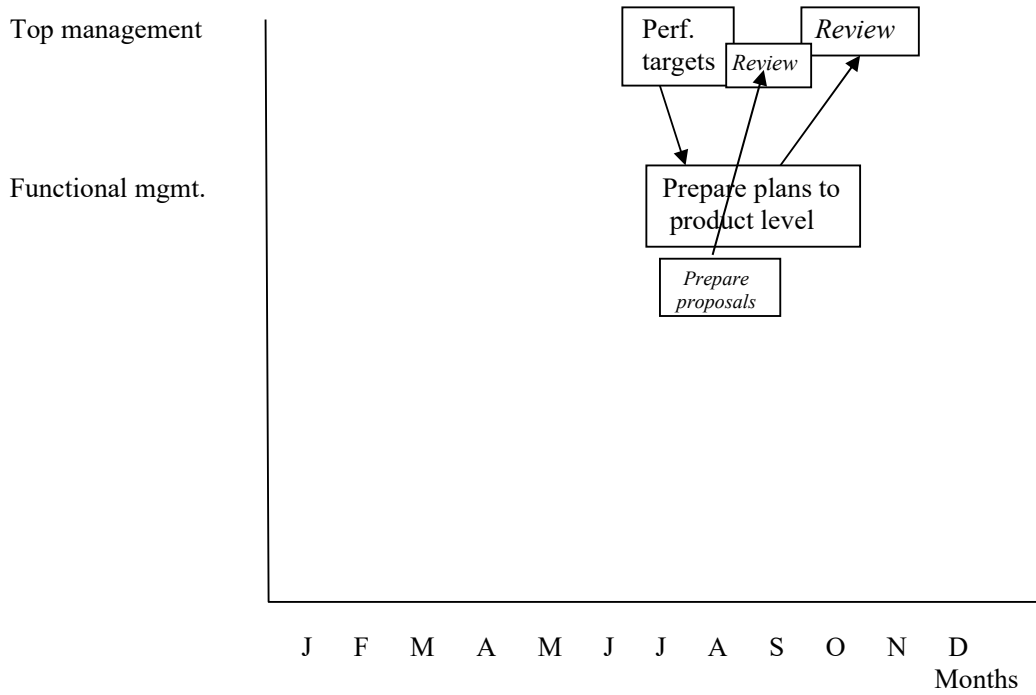
- How should R&D/operations coordination be improved?
- How should people be made committed to the company goal?
- Should the company buy the machine or give up the A-53 project?
- Does the company need a change of strategy?
- Should the company focus some cost reduction effort on SG&A expenses? Probably yes. They've risen from 46% of net sales to nearly 55% in six years' time.
- Should the long-range plan be more formal?
- Does the company need longer-term investment analysis criteria?
- Should the company have a direct link between bonuses and individual achievements?
- Should there be an "idea incentive" for hourly workers?
- Should the bonus opportunities be larger?
- Should someone in the controller's organization be involved in checking the capital budgeting analyses?
- Should the company have a flexible budget?
- Should the company have quarterly performance reviews?

What the company most needs, perhaps, are good performance standards. It is unreasonable to expect an annual 5% reduction in costs. Some firms, such as those in hi-tech industries, are able to reduce costs along an experience curve, but those reductions approximate a logarithmic reduction; they are not linear. The high pressure for unrealistic cost reductions leads to dysfunctional approaches, such as substitution of lower quality materials (or labor), as seen in this case. What is realistic? Perhaps BBI can obtain some external benchmarks from an industry association and use those as targets.

The focus also seems too much on costs. A more complete set of goals, including concern for safety and quality, would make for more productive management reviews and balance out the incentives.



**Figure 1: Timeline of BBI's annual budgeting and capital budgeting processes**



Note: Annual budget preparation process shown in regular font.  
*Capital budgeting process shown in italics.*

## Fit Food, Inc.

### Teaching Note

#### *Purpose of Case*

The Fit Food, Inc. (FFI) case was written to raise issues related to fraudulent and unethical financial reporting at business unit levels in divisionalized firms. The case provides context that illustrates performance pressures that lead managers to distort performance measures and the methods by which the distortions are accomplished. The case can be used to motivate a discussion of how some common earnings management actions can be prevented, or at least detected on a timely basis. It raises a number of control system, ethics, and corporate governance issues.

#### *Suggested Assignment Questions*

1. What went wrong?
2. What should Joe Jellison, Fit Food's CFO, do now that he knows of the problems?
3. Should the problems have surfaced earlier? If so, who should have done what? When?

#### *Case Analysis*

##### **Assignment Question 1**

I like to begin class by asking students the "what went wrong?" question. I phrase it as follows:

"As you could tell from reading the case, FFI had some problems. Let's focus first on the company. Is there anything unusual about this company that would lead you

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to believe that it would have the problems it did? Did the company set itself up to have problems?"

This question will evoke a number of responses. One explanation is that unreasonable pressures for performance combined with a lucrative incentive program and a "no excuses" management style motivated the division managers to take steps to boost performance in the short run at the expense of the long run. Their actions are common examples of the "operating myopia" problem that is discussed in Chapter 10 in the text. Some of the actions are relatively harmless, but others can have significant negative effects.

After students have identified the causal factors, ask if these characteristics are unusual. I think they will conclude that these factors exist, to a greater or lesser degree, in most corporations.

Then some specific gameplaying actions should be identified, described, and discussed. One way to get into this discussion is to ask, "What was the first questionable activity that you read about that suggested to you that something was wrong in this company?" A student will pick something out, and the discussion will be underway. If an item is missed, another student will likely bring it up. An alternate approach is for the instructor to choose which activities to discuss.

The case provides many examples of earnings management or gamesmanship, including the following:

#### Drink Division

1. 2007: Shipping moratorium, build-up of reserves, and the prepayment of some discretionary expenses.
2. 2008: Early-order program, reduction of reserves.
3. 2009: Re-build-up of reserves.

#### Cookie Division

1. 2008: Early-order program, shipping around the clock at the end of a quarter, ship unordered products, fraudulent orders with attempts to make the orders "stick."
2. 2009: Capitalize parts costs.

These specific actions provide opportunities for instructors to ask the following questions:

- (1) Is this action in the best interest of the division?
- (2) Is it in the best interest of the corporation?
- (3) Is it an acceptable business practice? Unethical? Fraudulent?

Question (1) will surface the short-term vs. long-term trade-offs faced in many managerial situations.

Question (2) will cause students to identify a sub-optimization problem—a business unit serving its own selfish interest. Most of these examples provide good illustrations of the “behavioral displacement” problem discussed in Chapter 5 in the text. The corporation’s control system actually motivates managers to take the wrong actions.

Question (3) opens the ethics issue that is the focus of Chapter 15. (Thus, obviously, this case can be used in conjunction with Chapter 5, 10 or 15.) The non-fraudulent actions, such as those taken in the Drink Division in 2007 are a particularly interesting ethics issue to discuss because the division is not overstating profits, and the accounting is done correctly. Still, managers are taking actions to make themselves look better cosmetically—e.g., higher likelihood of achieving performance targets, smoother earnings pattern—while taking actions that actually have negative economic effects, including a build-up in inventory and harmed customer relations. If students have a background in ethics, or if this case is used in conjunction with Chapter 15, instructors could do a full ethical analysis of this situation, with identification of stakeholders, analyses of the situation in light of one or more ethical reasoning models, and discussion of possible alternate courses of action. The word “fraudulent” is defined by the legal system. It is usually interpreted as a willful manipulation with an intent to deceive.

As the discussion unfolds in class, instructors can make any of the following points:

1. Research has shown that some of these actions are quite common.
  - a. Do managers judge the benefits of these actions greater than the costs? Or are these actions just unavoidable control system side-effects?
  - b. If everyone is doing something, does that mean it is ethical?
2. Top management and the board of directors must bear ultimate responsibility for what took place in FFI even though they were not directly involved in the deceptive practices.
3. Is income smoothing valuable? Most managers think it is, and they will argue that the stock market values, and even demands, it. However, smoothing distorts the numbers in the company’s financial intelligence system. It disguises trends and can severely harm the company’s early warning system.
4. Are “early shipments” acceptable if the customer authorizes the shipments? (Yes.) What if the authorization is only verbal? (Still acceptable, although this clearly provides an opportunity for abuses.) Can revenue be declared if the goods are stored in a truck or at an FFI warehouse? (Probably not, unless title has passed to the customer. Here the auditors seem to have concluded that title has passed.) Are the terms so liberal that the shipments should essentially be considered to be on consignment? If so, they are not sales.
5. Shipping unordered items should not generate revenues because of the lack of proper authorizations from the customers. But some transgressions were probably covered up by “making the sales stick.”
6. Unanimous agreement as to whether certain actions are acceptable or unacceptable does not exist. Judgments vary significantly with experience, across roles, across cultures, and more generally, just across people.
7. Some people believe that if managing income upwards affects compensation, it should be considered theft.

8. Is it acceptable to manage earnings *down* (i.e., be ultra-conservative) than to manage them *up*? (Probably not.)
9. Why would auditors accept the manipulations of reserves? Possibly because:
  - a. They would probably not be aware that FFI personnel manipulated the analyses to yield the answers they wanted. Probably the justification was credible. Judgments about reserves require estimates of the future, and there is a range of “acceptable” answers.
  - b. Auditors judge materiality at the corporate level. Auditors might neglect to investigate items that are material at the division level unless there is a possibility that if one division is doing something, others divisions might be doing something similar.
10. Capitalizing the cost of spare parts is improper, fraudulent accounting.
11. With tax accounting, most people are comfortable with the idea that taxable income should be minimized through all legal means. For financial reporting, is it acceptable to maximize income through all legal means?
12. As a division manager, what should you do if you think the accounting rules (e.g., requiring the expensing of R&D investments) are wrong?
13. How should a CEO define to middle management what is an appropriate “management” of profit and sales figures? Don’t do anything that compromises the long-term interests of the corporation? Don’t hurt customers? Don’t distort the fundamental trends in long-term profitability?

## Assignment Question 2

Joe Jellison, FFI’s CFO, must take some strong actions now that the gameplaying has been discovered. He should immediately inform the authors and the audit committee of the company’s board of directors of the problems. Company finance staff and the auditors will have to investigate the problems in the Cookie Division to determine what adjusting journal entries should be made. They should also investigate whether similar problems were occurring in the other FFI divisions. Fixing the problems will probably require public disclosures of the problems and restatements of prior period financial statements. These are serious problems. Certainly some members of management, certainly including most of the Cookie Division managers, and possibly also Joe Jellison himself, should lose their jobs. Should the Drink Division managers, and possibly even Sean Wright, suffer a similar fate?

More broadly, someone, perhaps Sean (or his replacement) must take steps to reestablish supplier, customer, creditor, employee, and investor confidence in the company. It is probably time to introduce an internal audit function to FFI. Accounting policies need to be written/clarified/reconsidered. The external auditors probably should be replaced, and the new auditors’ audit scope needs to be expanded. The board of directors needs to become more diligent. None of these improvements is sufficient by itself.

As students present their suggestions, it is useful to have them consider the costs of their recommendations. FFI was a small, very responsive, entrepreneurial company. Some of the student recommendations, such as for more extensive policies and procedures, will change the nature of doing business in this firm. The students should be made to consider these costs. They will probably conclude that companies like FFI are forced to rely to a considerable extent on ethical, professional managers.

### **Assignment Question 3**

Clearly the problems should have surfaced earlier. There are multiple failures. Identifying these failures will help the students think about what can be done so that FFI does not face these problems in the future.

One failure is on the part of the external auditors. Their audit plan seems to have been insufficient to detect the problems. FFI is a public company. Even if the gameplaying was not discovered directly, the internal control weaknesses should have been identified in the Sarbanes-Oxley Section 404 audit.

The FFI division controllers failed to fulfill their fiduciary obligations. Their management service role seems to have been dominated. But while division managers have the responsibility to bring deceptive practices to light, doing so often costs them their jobs.

Another problem is that FFI does not have an internal audit function. Internal auditors with the right audit plan would detect these problems. In the absence of an in-house internal audit function, FFI should have either outsourced the internal audit function, either to a specialist consulting company or another auditing firm, or otherwise compensated by conducting controller reviews of the operations in the divisions.

The audit committee of the board of directors failed in its oversight role. While the committee members probably could not have detected the problems themselves, they probably should have been aware of the pressures being put on the divisions, which raise gameplaying risks, and insisted that some kind of division-level audit procedures or reviews be conducted. Someone on the board needs to understand why this audit committee failure occurred. Does the committee not have people with the right expertise? Was the committee not getting the right information? Did the committee not meet often or long enough to consider such issues?

Near the end of class, it is time to ask students what should be done. All of the solutions (e.g., hire internal auditors) have costs, and the discussion should be pushed far enough so that students see that there is no panacea, and the judgments about benefits and costs are difficult. If a student suggests that the company needs a Code of Ethics, ask how the code should be worded, and enforced. Students should see that some risk of manipulative behaviors will always exist in decentralized organizations, particularly, because it is not cost effective to reduce the cost to zero.

### ***Pedagogy***

On the face of it, this is not a difficult case, and it is one that students find inherently interesting to discuss. Thus it lends itself well to an unstructured teaching style.

Addressing the issues effectively is not easy, though. Indeed, the prevalence of gameplaying activities suggests that most companies are unable to solve these types of problems.

In closing, instructors can make the following points:

This case raises a number of issues about proper financial reporting and effective corporate governance. The discussion process of this case provides the greatest pedagogical

benefits, and I do not think it is necessary (and perhaps not even desirable) for the instructor to provide a neat summary. But here are some general observations that might be made:

1. Research has shown that the types of gameplaying taking place in the Drink Division, particularly, are quite common. It is a rare organization that does not encounter at least some gameplaying activities. The accounting numbers are not as precise as many people believe them to be.
2. Most companies do not have fraudulent financial reporting problems as serious as those faced in the Cookie Division of FFI, but fraudulent reporting is a very visible problem that has attracted the attention of many people, including lawmakers and regulators.
3. Most people who get caught up in frauds are not bad people. They get caught up in the demands of the situation and/or temptations provided by control weaknesses. How do they convince themselves that their manipulative actions are acceptable?
  - a. They don't even think about it.
  - b. They think about self-preservation.
  - c. Rationalization: They feel they are doing what is best for the corporation.
  - d. They use the materiality argument—A little is OK, particularly where gray judgment areas are involved.
4. Multiple forms of controls are necessary to reduce the likelihood of deceptive financial reporting. However, each form of control has costs that should not be ignored. Adding controls should only be done after making judgments about costs and benefits. Because controls are costly, it is not possible to entirely eliminate all the various forms of gameplaying.
5. Being ethical usually pays off in the long run, but not necessarily in the short run.



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## **Atlantis Chemical Industries**

### **Teaching Note**

#### ***Purpose of Case***

The Atlantis Chemical Industries case describes the financial control system of a large corporation that operated in a highly uncertain environment. The company was making a major reallocation of resources away from its old commodity chemical businesses toward newer technology, faster-growing businesses. The new investments were large and risky, and the payoffs, if any, would come many years in the future. In the meantime, Atlantis managers perceived that because the company's stock was publicly traded they had to maintain some stability in current earnings. Those two objectives could conflict.

The case focuses on a debate taking place at Atlantis about the proper amount and the form of control over biotechnology R&D expenses. Atlantis's R&D managers argued that the newer technology expenditures, which would build the future of the company, were discouraged because division managers faced constant quarterly earnings pressure. They suggested that corporate R&D should have greater control over funding because the division managers could not be trusted to fund long-term investments. Other managers, however, argued that operating unit control over the risky expenditures was essential to ensure eventual commercial successes. This debate is essentially about whether Atlantis could suffer from a myopia problem and, if so, how that problem could be avoided.

#### ***Suggested Assignment Question***

Evaluate Atlantis's management control systems. What changes, if any, do you recommend?

#### ***Case Analysis and Pedagogical Suggestions***

In class, it is probably important to set the stage by noting that the case looks at control systems at two levels: control of R&D and control of the overall business. Then walk through

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the product development process—the time frame and people involved at each stage. Where are the risks? What are the sources of the risks? How well can the risks be predicted at each stage of the development process?

### **The Corporate Control System**

Atlantis' managers are trying to accomplish two things:

1. Spend the right amount on R&D (proper short-term/long-term trade-off).
2. Spend R&D money on the right projects.

Should Atlantis fund every worthwhile idea (i.e., those with a positive net present value)?  
Probably not:

1. Managers believe they face considerable pressure to maintain a steady earnings record to keep the stock price up. (Is the stock market that shortsighted?) If earnings are down, there will be pressure to cut R&D. If the R&D is valuable, this is myopia.
2. The numbers showing the positive net present values are quite soft. The total risk to the company of funding every good idea would be too high.

What does Atlantis do to ensure the proper short-term/long-term trade-off?

1. Planning reviews involving inputs from many managers.
2. Fund Class III R&D (particularly biotechnology) at the corporate level. These are not charged to business units to shield the expenditures from short-term budget pressures at the business unit level. (They are still subject to corporate budget pressures.)
3. Push most R&D expenditures down to divisions. This helps ensure commercial viability of the products developed.
4. Allow some flexibility in the budget constraints. If profits are up, allow more R&D expenditures. Plus the case shows that John Pastor (head of the Agricultural company) was allowed some slack to cushion the cuts.
5. Make sure development money on high priority projects is spent, regardless of current profitability.
6. Base evaluations partly on nonfinancial measures of performance. (This is not explicit in the case, but Atlantis monitors several nonfinancial measures. However, they tend not to be highly weighted in importance.)
7. Use a long-term incentive plan. (However, it is based only on *corporate* performance. Does this provide much motivation for business unit managers?)
8. Use an unwritten long-term incentive plan? Something like, "If you perform well over a substantial period of time, the company will take care of you." This probably exists.

Why not leave **all** the R&D at corporate level? Or conversely, why not push all of it down to the operating units? By controlling basic R&D, in which lead times are greater and ultimate success more uncertain, at corporate level, Atlantis is retaining a substantial portion of the company's risk at the corporate level. It shields its divisions from some of the uncertainty inherent in the company's new strategic direction.

Some students will undoubtedly conclude that marketing should be brought into the development process earlier to assess the commercial viability of the products, to ensure that products being developed will not be directed at nonexistent markets. Atlantis is, after all, in the business of developing, making, and selling products, not merely discovering knowledge. However, how is eventual commercial viability to be judged. The people who are used to, and good at, marketing existing products may not be good judges of markets for new products.

It is useful to spend some time on the incentive system and, in particular, the impact of the 50–50 achievability of targets. If all divisions' targets are only 50% achievable, the corporate target is at risk. Atlantis' CEO would be wise to keep a cushion before committing to the Board or the Street.

Atlantis has made a significant shift in its corporate strategy. This could motivate a discussion of how this shift should affect performance measurement. If long-term product development becomes a key success factor, some method will be needed to monitor that. Some companies use a series of evaluations at important project phases, often using many evaluative experts and outside consultants. Clearly that sort of evaluation is qualitative, more than quantitative, but if that's the business you are in, that's the way you have to evaluate achievement. Atlantis's managers clearly understand that goals must be adapted to the businesses' strategies. For example, they choose different weights for the three financial performance measures, ROCE, net income, and cash flow, for divisions with different strategies. The goal of meeting annual budgets is probably less important in the new technology businesses, but it remains important in the "cash cow" commodity chemical businesses.

What else might Atlantis managers do?

1. Better long-term incentives. For example, base them on multi-year profits, provide royalties on profits from successful products to those who had a hand in developing them, or make the implicit long-term rewards more explicit.
2. Develop better nonfinancial performance measures—leading indicators of performance.
3. Capitalize R&D expenditures for internal purposes. Provide a better matching of revenues and expenses. Less incentive to cut expenditures when profits are down.
4. More subjective assessments of performance.

I think the Atlantis system is quite well thought out, and most students draw the same conclusion. This is probably a study of good, if not best, practice.

## Diagnostic Products Corporation

### Teaching Note

#### *Purpose of Case*

This case illustrates the control system used in a field service engineer (FSE) setting. The case is particularly interesting because the company, Diagnostic Products Corporation (DPC), is in the midst of a significant change. Formerly, company managers controlled FSE inputs—they paid FSEs for hours worked. Now they are attempting to measure FSE outputs, or results, and to provide performance-dependent compensation.

DPC managers have determined that total customer satisfaction is the primary result of the FSEs' work. However, it is not the only important result. They are facing a number of challenges in understanding all of the important result areas, how to measure each of them, and how to weight them in importance. Thus, the case illustrates most of the difficulties companies face in developing a combination-of-measures results control system, one complex form of which is a Balanced Scorecard.

#### *Suggested Assignment Questions*

We have used this case both for class discussion and exam purposes. As an exam, we used the following set of questions:

1. Evaluate both the design of the DPC Performance Bonus Program for U.S.-based field service engineers (FSEs) as it currently exists and the way in which the Program is being implemented. What changes would you suggest, if any? Explain.
2. Instead of using a results-control system like the Performance Bonus Program could DPC control its U.S.-based FSEs effectively using only action and/or personnel/cultural controls? If so, what would such a system look like? If not, why not? Explain.

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Diagnostic Products Corporation case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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3. In answering the question posed below, assume the following hypothetical facts:

In February, Joe, a DPC FSE, was called to a large laboratory in a small Midwestern U.S. city to perform a repair job on an Immulite 2000 instrument. Soon after he arrived, he told the laboratory client personnel that he thought he could complete the job in two hours. However, he encountered some significant difficulties and the job took two days. Harvey, the laboratory manager, was quite upset because the laboratory could not afford to have the instrument down for that long in such a heavy workload period.

After the job was completed, Joe invited Harvey out for a “conciliatory dinner.” After a few rounds of drinks, Joe explained why the repair job had taken longer than expected. Then he handed Harvey the DPC customer satisfaction survey form and asked him “to be kind” in completing it. The restaurant bill for the two of them for the evening was \$179.80.

Question: How would you analyze the ethics of Joe’s behavior? Your conclusion as to whether Joe acted ethically is not of critical importance. What is important is *how you structure your ethical analysis*.

If the case is to be used for class discussion purposes, Questions 2 and 3 are optional. If all these questions are used, the wording should be altered slightly. In Questions 1 and 2, the word “Explain” should be deleted. In Question 3, the last two sentences in the Question paragraph should be deleted.

## Case Analysis

### Clarification of Facts

Before starting the system-evaluation discussion with the students, it is useful to clarify some of the facts in the case. Hit the high points about the corporation, its business, the roles of the FSEs, and the old and new systems for compensating the FSEs. In particular, it is useful to clarify the importance weightings placed on the various performance areas in the new incentive system. These facts can be developed in a format as shown in Table TN-1:

**Table TN-1**  
**Performance Areas and Their Importance Weightings**

<b>Performance area</b>	<b>Importance weighting</b>
1. Cross-training	Points
2. PM completion	Points
3. Teamwork	1–2% of base salary + points
4. Complete first visit	points
5. Call back rate	1–10.67% of base salary + points
6. Administration	points
Total	2–13% of base salary + points

At the time of the case, it was not known what value would be placed on the point accumulations. The monetary compensation can be compared with that provided by the old

comp-unit system. Under that system, the FSEs were paid an average of 7% of base salary. The case does not disclose the range of comp-unit pay.

## System Evaluation

After the facts are clarified, the evaluation discussion can begin. The following set of questions can be used to guide the evaluation, although some of these answers might already have come out while the facts were being clarified.

1. What was the goal in establishing this new incentive program?

There were two goals. One was to influence the behavior of the FSEs in desirable ways. Thus, this program was serving a control system role. The other goal was to provide fair compensation, which is necessary for attracting and retaining good FSEs. In particular, the comp units had to be replaced.

2. What are the *desired* behaviors? What makes a good FSE?

Good FSEs:

- Keep their customers satisfied, as much as is possible. However, the goal is not 100% satisfaction, as things that the FSE cannot control can and will happen.
- Control service costs.
- Fill out the needed paperwork and input the data to DPC's information system.

3. Does the program include the right measures, and are they weighted properly?

This is a critical question. It seems clear that keeping customers satisfied is the FSEs' primary goal. Most of the measures included in the Performance Bonus Program are intended to be among the most important drivers of customer satisfaction. Controlling service costs is an important secondary concern. Moreover, feeding the company's information system is also deemed important. An FSE cannot be rated excellent without superior performance in all three of these areas.

It is useful to raise and discuss a number of measurement issues:

- a. Why include the teamwork factor, which is not highly controllable by individual FSEs?
- b. Is there too much emphasis on performing quantities of preventative maintenance (PM) and not enough on non-PM activities?
- c. Do FSEs have enough incentive to control the *costs* of their activities? Is this performance dimension weighted high enough in importance?
- d. Are differences in customer mix and the effects of uncontrollable factors worrisome?
- e. Can the measures be "gamed? Most measures can be gamed. For example, one of DPC's competitors rewards FSEs based on a quick response time. However, in some cases after FSEs got a dispatch, they called the customer to say that the problem was fixed. Then they went out the next day and fixed the problem.

In DPC's case, there are possible end-of-quarter games, games that focus excessive attention on the IMMULITE instrument rather than on the more complex IMMULITE 2000; games that involve direct calls from customers to FSEs to avoid the dreaded

“call-backs;” games to avoid certain types of calls from the dispatchers; and games that lead to inventory build-ups to ensure complete first visits. Can DPC managers detect and control these games?

- f. Can the evaluations in the administrative area be made less subjective, or is subjectivity not a problem? The answer to this question depends on whether the evaluators are informed and unbiased. Or should some of the administrative areas be removed from the bonus program entirely, based on the belief that these are just routine tasks the FSEs must perform?
- g. Are the problems with the direct measurement of customer satisfaction significant? The 25% response rate seems low. How can this be improved?
- h. What are the drivers of customer satisfaction? DPC has impounded their assumptions about these drivers in this system. Do any look suspect? Can these be tested empirically? If so, how?
- i. The best FSEs are qualified on the 2500 and SMS, but they are not rewarded for this work. Is this a flaw in the system?

One useful way to evaluate each of the measures included in the system is in terms of the set of measurement evaluation criteria (i.e., congruent, controllable, timely, precise, etc.) described in several chapters in the book (e.g., Chapters 2, 10).

4. Is the reward portion of the program well designed? In particular,
  - a. Are the rewards large enough to attract attention? The rewards are not large here, but students should recognize that the total reward is not limited to the monetary reward, which is just a small percentage of salary, plus the allocation of points, which have unknown value at the time of the case. This system is designed to form the basis for an FSE's entire performance evaluation, which can affect the assignment of other rewards, such as salary increases and promotions.
  - b. Are the payments made on a timely enough basis to ensure that the FSEs' attention will not wander?
5. Do the benefits of this program exceed its costs?
6. Was the deliberate, gradual implementation approach wise? Because they were not experienced in the design of incentive compensation systems and because many issues had to be worked out, perhaps the DPC managers should not be faulted for their phased-in implementation strategy. However, some students will be critical of this approach particularly because the case is written at an intermediate stage of development.
7. This is a system designed for U.S.-based FSEs. Would this same system work for non U.S.-based FSEs?

After the evaluation is complete, students can be asked for their suggestions for improvements. There are lots of possibilities relating to any or all of the areas identified above. For example, some students will suggest just holding FSEs accountable for direct measures of customer satisfaction, not some combination of satisfaction plus satisfaction drivers. Some students will suggest holding the FSEs accountable for the average percent of time the instruments in their territory were operational. Moreover, some students will raise points related to the values that should be attached to the points earned, the high point weighting assigned to the administrative function ratings, the exclusion of the newer instruments (e.g., 2500), and

ways of getting better direct measures of customer satisfaction. However, not all suggestions are good. Instructors should invite critiques of suggestions as the ideas are raised.

### **Control Alternatives**

Question 2 in the suggested assignment raises the question as to whether there are control alternatives that can be effectively used here. The various forms of controls often serve as substitutes. Maybe a combination of action and personnel/cultural controls could be made to work. In part, DPC management could assign FSEs to jobs and monitor their work through action or trip reports. Devices such as hiring and training practices and group rewards could provide reinforcement.

On the other hand, good arguments can be made against the use of action controls, particularly in this setting. It is not clear that managers can always distinguish good from bad behaviors because the jobs are so varied. Plus, action controls would probably stifle the FSEs' initiative and creativity.

### **The Hypothetical Ethics Question**

Question 3 in the suggested assignment can be omitted unless the instructor wishes to devote a portion of the class to an ethical discussion. Ethics is not discussed in the textbook until Chapter 15. Another problem here is that probably little time will be left in a normal-length class to discuss the ethics issue. Note, however, that this ethics question can help students to understand that the FSE can take actions to manipulate the customer satisfaction ratings.

Perhaps the key point to reinforce here is that ethical analysis is much more than opinion-giving. A good ethics analysis should be structured using a multi-step process such as that described in Chapter 15.

1. Determine the facts:

- Joe, an FSE, told his client that he could complete a repair in two hours, but it took him two days.
- The client was upset that the instrument was down that long during a busy time period.
- Joe took the client out for an apparently elaborate dinner to smooth over the problem.
- At this dinner, after drinks, he asked the client to complete the customer satisfaction survey, with the request to "be kind."

2. Define the ethical issues:

Major ethical principles:

1. Utilitarianism (greatest good for the greatest number of people)
2. Fairness
3. Duties and obligations
4. Virtues

Each of these ethical principles or models suggests that this example raises an ethical issue. The corporation and some of its stakeholders (e.g., shareholders, managers, other FSEs)

might be harmed if Joe's actions bias the client's customer satisfaction ratings. The bias would not be fair to other FSEs whose performances will be compared with Joe's (assuming they don't engage in similar behaviors). Joe might be said to have an obligation to collect unbiased customer satisfaction information, particularly since such information is an important input to managers' decision making. And Joe might be said to be acting less than honestly in trying to manipulate the customer satisfaction ratings.

3. Identify the decision alternatives and their probable consequences:
  - a. Apologize to the client but leave the customer satisfaction survey for the client to complete on his/her own time, as is normally done.
  - b. Try to manipulate the customer satisfaction ratings as was done in this hypothetical example.
4. Compare the alternatives with the ethical principles and choose the best alternative:

In this case, most people, using any of the ethical principles, will probably judge Joe to have acted in an unethical manner in this situation.

### ***Pedagogy***

This case presents the instructor with a number of options. By itself, a system evaluation discussion can easily consume an entire 75-minute class. If the instructor wishes to discuss the other issues, minutes will have to be apportioned. Here is a reasonable time budget for a class that attempts to raise all of the issues discussed in this teaching note:

Clarification of facts	10 minutes
Evaluation and suggestions for improvement	40
Control alternatives	15 (10)
The ethics of the hypothetical situation	<u>10 (15)</u>
Total	75 minutes



## **Game Shop, Inc.**

### **Teaching Note**

#### ***Purpose of Case***

This case describes an unusual, innovative application of a results control system—use of a “billing scorecard” to improve billing performance in a project environment. Most companies just define a set of billing policies and procedures and make sure billings clerks follow the procedures. Instead, Game Shop, Inc. (GSI)—the disguised name for a real company—held its project (and business unit) managers accountable for multiple aspects of billing performance. Students have to think about whether this company has chosen an effective way to solving a significant, and growing, problem for the company or if has carried its “metrics centric” culture beyond what is appropriate.

#### ***Suggested Assignment Questions***

1. Why was GSI’s production quality control performance so much better than its billing performance?
2. Would you include billing performance among a short list of “critical success factors” for GSI? If so, why has it apparently not received much attention from management up until now? If not, why all the concern now?
3. Evaluate the billing improvement effort and each of the elements of the system that emerged. Comment specifically on the billing scorecard, detention meetings, P-CARs, and any other system elements that you believe are relevant.
  - a. In considering the scorecard, be sure to address the following questions: What are the Scorecard and each of its measures trying to accomplish? Are these the right measures? Does each measure add unique value? Are the measures weighted appropriately in importance? Are the business unit grades generally consistent across measures? Can any of the measures be distorted or gamed?

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Game Shop, Inc. case.*

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- b. Do you believe that David's improvement efforts will close the gap between production and billing performance enough to meet project goals? Explain.
  - c. Do you have any suggestions to improve the billing process? Explain.
4. GSI's ultimate goal is "perfection." Can this system be used to achieve billing perfection as it is designed, or will changes have to be made, or might even a totally different approach be necessary? Explain.
  5. The Billing Scorecard is a results-accountability approach to address the problem, chosen because this company's culture is "metrics centric." What are the advantages and disadvantages of using a results-accountability approach? What other alternatives might have been used to solve the problem?

### **Case Analysis and Questions to Ask in Class**

1. What are the critical success factors (CSFs) for Game Shop?

- Customer satisfaction/retention
  - Keep up with technology
  - Production quality/delivery
  - Billing accuracy
- Cash flow/maintain adequate working capital
- Cost control/efficiency

If billing accuracy is a CSF, why did it take the company so long to start focusing on it?

- Original focus on production quality. Billings not seen as important until customers complained.
  - SOX caused customers to request better invoice accuracy.
  - Numbers (accrued revenue) got bigger as company grew, which is now over \$5 million. The working capital must be financed. It seems worth spending money to fix the problems.
2. This is an unusual application of a results control system. Most companies just define a set of billings policies and procedures and make sure billings clerks follow the procedures. Would a strict policies and procedures-type action accountability system work here?

Probably not:

- There is no standard billing process. There are so many exceptions:
  - Bills and processes are often tailored to the customer.
  - There is sometimes no purchasing order (PO).
  - Projects keep changing, making POs likely obsolete anyway.
- Results control is appropriate when the actions that should be followed in each circumstance cannot be adequately defined.
- Note, however, that six customers provide 90% of the revenue. Could they have developed six sets of policies?

3. Goal setting
  - a. The purported goal is “perfection”. Why not just set that as a goal?
  - b. Instead:
    - i. 98% accuracy (more realistic than 100%)
    - ii. Reduce accruals to maximum of 30 days sales

Where did these goals come from? They were set by the CFO, certainly somewhat arbitrarily. How can goals be set before management knows what is causing the problems? But maybe these goals were set to reflect what the company must do in order to retain customers?

Another way to look at it is that they set some initial improvement goals. Then they see how performance improves and adjust later if necessary. A “trial-and-error” approach, if you like.

4. If this project is successful, it will:
  - Help retain customers
  - Bring in revenue more quickly. Reduce accrued revenue amount from over \$5 million to about \$1.3 million.
    - How much is that worth? If WACC is 7%, it is worth \$259,000 per year. Is it worth spending more than that? How much are they spending now?

5. The improvement process
  - a. Brainstorm to identify the causes of the errors. Build a fault tree. (They identified nearly 100 different causes.)

“A lot of controls were missing.” Three main categories of problems:

- System/process issues
  - Customer issues
  - Management issues
- b. Design a billing scorecard
  - c. Hold people accountable
6. The three main categories of causes:
    - a. System/process issues. Billing and IT departments resistant to change.
      - i. Billing department
        - Comfortable with existing system (this is often correlated with age)
        - Fear of loss of job. How could that happen? (Fire for incompetence. Automate job away.)
      - ii. IT department—focused on operations
        - If top management tells them to place equal weight on billings, would that solve the problem? Probably not. Not the way they are used to operating. Plus, management probably does not believe it.

- b. Customer issues
    - i. Customers want flexibility and do not want to accept bills until the project is finished. Customers sometimes throw up obstacles just to delay their payments.
    - ii. GSI can't completely control the customer, but it can influence them to provide a PO up front and to pay for completed pieces of a job. Customers' finance departments are actually advocates for timely POs, so GSI has tried to build relationships with them.
  - c. Management issues
    - i. Lack of motivation—more focused on production
    - ii. No written instructions
    - iii. PMs lack of understanding
    - iv. No redundancy
  - d. If GSI were a public company, would these control problems be written up in a Sarbanes-Oxley (SOX) 404 audit? (Yes.)
    - i. Would they cause an adverse 404 opinion? (Possibly. Some of the issues/errors would probably be judged as significant deficiencies.)
    - ii. Game Shop is privately held. Does that relieve them of the legal obligation to have good internal control system? (Yes and no. Although not subject to the requirements of SOX, companies still need to maintain a good internal control system.)
7. The billing scorecard
- a. Four measures (weighted equally):
    - i. Percent of sales invoiced (a “plus”)
      - Relates to goal to reduce accruals to no more than 30 days of sales.
      - Tells whether the accrual pile is growing or shrinking.
      - Customers will take advantage of GSI if the company lets them.
      - However, measure will look better if sales are declining and worse if they are increasing. Affected by sales spikes. Harder to bill if very busy.
      - There is a lag between sales and billing, so the measure will be distorted by seasonality. Several business units received high scores on this measure even though they performed poorly on every other measure ... probably because of seasonality issues.
      - The measure can be “gamed” by overbilling customers (probably not possible long term, but there is no penalty in these measures for billing inaccuracies).
    - ii. Adjusted number of weeks of sales accrued (a “minus”)
      - Tells how big the accrual pile is.
      - Relates to same goal as Measure 1.
      - Adjusted for the customer-caused portion of the delay.

- 13 week rolling average used for sales, so seasonality is less of an issue.
  - There is no motivation to decrease the customer approval delay. (One can perform very well on this measure but still have significantly more than 30 days of sales accrued because of customer approval delay.)
  - Gaming. Accrual estimates can be lowered or their recording can be delayed. There is no audit.
- iii. Percent of sales shipped without a PO (a “minus”)
- Tells which business units are not doing their job properly, since nothing is supposed to ship without a PO. Securing a PO is the most basic billing task.
  - It is somewhat an indicator of accuracy because having the wrong PO number or no PO number was the most common billing inaccuracy.
  - Can't be gamed.
  - But only available for five business units.
- iv. Percent of accruals < 30 days old (a “plus”)
- Relates to same goal as Measures 1 and 2, but it tells how much of the accrual is less than a month old and therefore less at risk.
  - Sharp cutoff ... doesn't recognize difference if accrual is 32 days old or 150 days old.
  - Unlike Measure 2, business units with long customer delays are penalized, perhaps fairly? For example, the business unit Creative International Menu performs well on all other measures, but poorly on this one, probably because of their five week customer approval delay.
  - Gaming ... delaying the recording of accruals would improve the measure. Overbilling or understating accruals would not improve the score.
- b. Evaluate the set of measures in terms of measurement criteria
- i. Congruence
- The set of measures seems to be incomplete. In particular, accuracy is described as being one of the key goals. It seems to be left out of the billing scorecard.
    - a. Accuracy was a continuing frustration for the Operations Billing department. Some departments were over-reporting revenue and later writing it off. Some said they were waiting for a project to be completed before billing, even though the project had been completed for some time. Moreover, some sloppy PMs turned in billing packets with incorrect information (e.g., wrong client, wrong PO number, wrong billing codes).
    - b. David was never able to come up with an easy way to measure the inaccuracy that upper management had complained about (wild variances between estimated and actual income; misreporting of reasons why things were not billed). David tried to conduct an “accuracy audit,” but his efforts were met with hostility and threats. In addition, the billing department did not directly handle some of the billing—certain business units were responsible for their own invoicing—so they could not measure them. Moreover, some business units did not report their delivery and approval dates to David's department (Operations Billing), so David was unable to

grade them on timeliness. As a consequence, David settled for the logic that by reducing the accrual, they were taking steps to reduce inaccuracies in the accrual. If the accrual was small enough, it would not matter if some units were off in their estimates here and there. They focused on the other kind of accuracy (accurate billing, not accurate estimates).

- c. The accuracy complaint has gone away in the departments with low accrual balances.<sup>1</sup>
  - d. In addition, the accrual was reported to upper management with explanations coded as to why the item was not billed. The most popular explanation (“We don’t have the PO”) was not accepted easily. Management was trying to impress on the PMs and business unit managers that shipping without a PO was a poor excuse that leads to a growing accrual and many billing packets were being turned in without a PO.
- ii. Controllability
    - The people responsible for billing timeliness and accuracy (PMs) did not have authority to make some necessary changes. Customer behavior, billing department behavior, and systems issues affect performance and cannot be completely controlled by PMs. (There may be some discussion about how much PMs can control the above). Outside, uncontrollable forces are less of an issue for production quality.
    - The finance department, which should be most concerned with cash flow and billing, had no reporting authority over PMs. Should billing responsibility reside with PMs or would it be better to let PMs focus on production and shift billing responsibilities to the finance department? Or strong dotted-line reporting to finance?
    - Production quality was the primary responsibility of the people being measured on it. Billing was NOT the PMs’ primary responsibility.
  - iii. Accuracy—can measures be gamed? No audit
  - iv. Timeliness (not a problem)
  - v. Understandability (not a problem)
  - vi. Cost effectiveness (probably not a problem)

Overall:

- None of these measures described in the case addresses accrual accuracy.

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<sup>1</sup> Instructors might not want to complicate the discussion by bring up this fact, but after the time of the case, the company did create a second scorecard using information from the billing department. The two measures on that scorecard were:

(1) Rejection score:  $\# \text{ rejected packets} \times 5 / \# \text{ packets submitted}$ . This was intended to tell who is being sloppy, not controlling their billings well. (The multiple of 5 was designed to signal to the PMs that these rejects were extremely important and would hurt their score immensely).

(2) Late submission score:  $\# \text{ packets submitted} > 2 \text{ weeks after approval}$ . This was designed to show who was not billing on time.

The score on this scorecard started out at a C average in October 2010, but by the middle of 2011 the company-wide average was A-.

- Measures 1, 2, 4 all attempt to address billing timeliness. Can all be gamed, but cannot all be gamed the same way. Measure 1 is probably the most volatile and least accurate. It does tend to be the “outlier” when you look at all four of a business unit’s scores.

c. Accountability

i. “Grades” are something that everybody understands

ii. Detention meetings (<2.0 grades)

- Purposes: Try to understand why there is a low grade. Look at details. Decide how to fix.
- Do business unit managers enjoy going to these meetings? No. Therefore, the meetings are motivational. Management chose the detention label purposely to make people feel that being in that meeting was a bad thing.
- Analyze controllability. Adjust if necessary.
- Diagnose/correct/learn. The idea is to get people to think differently.
- Is it a problem that PMs can negotiate their scores in detention meetings? Maybe not. This is the way that controllability, and hence accountability, can be assessed. The subjectivity probably makes the evaluation more fair.

iii. P-CARs

- Describe where the process went wrong, who was responsible, corrective actions. The focus is on the process. The only names mentioned are those who are responsible for making changes.
- Production errors are penalized with CARs, which become part of an employee’s personnel file. Should billing errors also be more severely penalized?

iv. Bonus modifier. Billing accuracy has to meet a threshold level of performance or the bonus is modified downward.

Production quality is highly visible because of the monthly management review report. Will the scorecard get the same amount of attention? Should it be included as part of the management review report?

Billing accountability is more difficult because:

- a. Billing is not the primary responsibility of the PMs.
- b. The finance department, which is most concerned about cash flows and billings, has no reporting authority over PMs. (Should billing responsibility be shifted to the finance department?)
- c. Controllability is a problem. The PMs do not have authority to make some necessary changes—behaviors of customers, billing department, and IS department.

8. Overall evaluation

a. The right approach? An innovation?

i. Early results appear excellent.

- ii. Production quality is deeply entrenched, long-standing company value. It will take some time and reinforcement for billing quality to become an expectation as well.
  - iii. They seem to be on the right track, but missing a score for billing accuracy.
  - iv. Still too much focus on the back end. Need to formalize the whole process with POs and change orders.
  - v. Encourage more change of customer behavior.
  - vi. Invest more in the billing systems as company grows.
  - vii. Need hierarchy for billing and customers ... special treatment for big customers.
  - viii. Don't need quite the level of redundancy ... three of the four measures are focused on essentially the same goal.
- b. Suggestions that students have made:
- i. Focus more on accuracy. But what is accuracy? Certainly no errors in billing, no double billing. But how to address under-billing?
  - ii. Measure customer complaints, or satisfaction.
  - iii. Better PMs—hiring/training. More PMs with some financial background.
  - iv. Have PMs log interactions with customers so that those can be better understood.
  - v. Better IT support.
  - vi. Redundancy—cannot wait for employee to return from vacation.
  - vii. Better documentation of procedures (part of training).
  - viii. Cross functional billing teams. PMs and billing personnel. Or just give billing responsibility to finance department?
  - ix. Formal top management approvals for doing work without having a PO.
  - x. Peer reviews or peer meetings to share best practices.
  - xi. As the system develops, take the subjectivity out of the detention meetings. Tailor scores to department.
  - xii. Outsource.
  - xiii. Provide positive reinforcement, an incentive to do well, rather than an incentive not to fail.

## **Pedagogy**

The questions discussed above provide one plan for teaching the case that has been used successfully both with graduate and undergraduate students. The outline is logical and keeps the discussions on track. The accounting students, particularly, really tend to get engaged in the case discussion. They tend to find the approach to the solution of some common problems innovative.

One caution: It is critically important early in class to make sure all students understand the unbilled receivables problem. Some students get confused because accounting revenue recognition rules generally do not allow companies to recognize revenue until the product is shipped as complete. However, this is a long-term project environment where portions of the project are deemed to be complete and, hence, revenue can be recognized along the way.



## Family Care Specialists Medical Group, Inc.

### Teaching Note

#### *Teaching Objectives*

This case has two main purposes. First, it offers students an opportunity to ponder and resolve the issues involved in designing a performance measurement and incentive compensation system for highly skilled professionals, in this case, doctors. Second, it stimulates students to carefully consider the links between an organization's mission, goals, and its incentive system. The goal of this medical group is not just maximization of owner value. The organization also aims to achieve patient service and doctor training goals. There are conflicts inherent in this complex set of goals.

#### *Suggested Assignment Questions*

1. What purposes are served by the FCS physician compensation system? Must some of the doctors' compensation be made performance-dependent?
2. Is the current system an improvement over the QIIP that it replaced? Explain why, listing the major strengths and weaknesses of both plans.
3. Are the incentives provided by the existing system "balanced" or are some forms of initiative rewarded more generously than others? In particular, compare the average reward for seeing additional patients during regular sessions to that for seeing additional patients during "extra" Saturday sessions. How might the existing system affect FCS physicians' allocation of effort?
4. What are the major constraints on the design of any physician compensation system for FCS? In particular, how should FCS decide the appropriate reward, if any, for higher performance?

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*Research Assistant David P. Huelsbeck and Professor Kenneth A. Merchant prepared this case as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.*

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5. What changes to the FCS physician compensation system, if any, would you recommend to Dr. Samaniego?

## **Case Analysis**

### **1. What are the goals of FCS?**

- a. Make money.
- b. Provide quality care to patients in an under-served community, many of whom are covered by the government's Medicare and Medicaid plans, which provide more limited coverage than private insurance plans.
- c. Train young doctors through a residency program at White Memorial Hospital.
- d. Provide a desirable workplace for the medical practitioners.

All of these goals are important, but to some extent they conflict.

It is important to highlight the fact that the goal is not maximization of profit (value). Finances are important because they help to attract and retain good doctors, and they provide an operating safety cushion. However, finances are a constraint rather than a primary goal.

To highlight the trade-off, ask the students which type of patient FCS would rather have:

- One from outside the neighborhood, who has a premium private health care insurance plan; or,
- One from the neighborhood on Medicare (funded by the U.S. federal government), which pays at rates 30% lower than the private plan. (To make the point more explicitly, the instructor could change the example to a Medi-Cal patient. Medi-Cal, the health insurance plan funded by the State of California for indigent patients, pays on the order of 70% less than private plans.)

Serving the second patient is more consistent with FCS's mission, but serving some of the first type of patient helps pay the bills. Ideally the practice will have a mix of patients.

### **2. The old plan (QIIP)**

Clarify the key elements of this plan, including the points allocated to specific areas of performance and the payout potentials (20–25% of total compensation, which is the same as 25–33% of base salary).

Points to raise or to let emerge in this discussion:

- i. The plan is quite subjective. Only the "meetings" measure can be captured objectively. The other items must be judged subjectively.
- ii. Any weight assigned to clinical efficiency or total clinical hours was limited to a portion of the 35% allocated to the Site Medical Director's evaluation. There was little provision for individual physicians to pursue higher total compensation in return for greater effort or greater commitment of hours other than through moonlighting outside of FCS.

- iii. Patient satisfaction depends as much on the performance of the clinic as that of the doctor. Studies have shown that patients are generally unable to judge the quality of care they are receiving.
- iv. This plan does provide guidance to the doctors as to what is expected.
- v. Are the weightings of the various factors set properly?

### 3. **The new plan**

Points to raise:

- a. Doctors can work weekends if they want.
- b. They get pay for being on call (1<sup>st</sup> call, 2<sup>nd</sup> call).
- c. Productivity incentive (target = 14 patients per half day session).
- d. No bonus if only teaching duties.

Issues:

- a. Why is the target set at 14? Doctors can still earn a bonus if they see less patients than target, but nothing for seeing more than 14. (Exhibits 5, #6; see also below for detailed calculations.)
- b. The productivity bonus appears not to be working (Exhibit 5). Only one doctor has met the target. Moreover, the number of patients that can be seen in any given time frame varies significantly by specialty.

### 4. **What purposes are intended to be served by each of the FCS compensation plans?**

#### A. **Generically**

Incentive compensation systems can be designed with some or all of the following purposes in mind:

- a. Motivation, which includes two elements:
  - i. Direction.
  - ii. Effort.
- b. Wealth sharing:
  - i. Signals that “we’re all in this together.” Can lead to social/cultural control.
  - ii. Makes cash flows and profits more variable with performance. When performance is down, so are cash outflows and expenses.
- c. Tax efficiency: increase participants’ after-tax income.
- d. Attraction and retention of valuable personnel.
- e. Perceptions of fairness, which can increase morale and motivation.
- f. Save cash (e.g., use of stock options).
- g. Retain top management power (e.g., through the heavy use of subjectivity).

## B. The old (QIIP) plan

The old plan was aimed primarily at motivation—informing the doctors about what was expected of them and rewarding them for doing what was expected. However, it seemed not to provide incentives necessary to attract and retain staff. In the Los Angeles area, Kaiser was the largest employer of doctors and tended to set the market for pay. Kaiser offered doctors significantly more money than FCS. The case says the differential is about 20%. Instructors can assume that the base salary at FCS was \$140,000, while at Kaiser it was \$168,000.

An interesting point of discussion that energizes many students is regarding the issue as to whether doctors are motivated by money. There is evidence in the case that they are. Doctors gravitate toward the higher paying specialties; they often have large student loans they need to pay off; and they are leaving FCS to work at places like Kaiser, which pay more money.<sup>1</sup>

Would any doctor be willing to work at FCS for less money? The answer to this question is yes. They might be attracted to the FCS mission. They could value serving the community. They could value the teaching mission, which is noble (intrinsic) and provides more work variety and flexibility. Places like Kaiser are medical “factories” where the doctors just see one patient after another. However, the concern for FCS is that they might only be able to attract less qualified doctors, those who would not be hired at Kaiser.

## C. The new plan

The new plan was designed, first and foremost, to help improve FCS’s ability to attract and retain good doctors. It provided the doctors with opportunities to earn more money. Doctors can earn more money by working more hours or by working more productively (seeing more patients per session). The plan also provides the benefit of allowing doctors who want to earn more to reduce the burden of other doctors who wish to work fewer hours.

Some students will rightly be concerned that clinical efficiency of individual physicians is not independent of the quality of care delivered. As noted in the case, some patient encounters are more complex and time consuming than others. Thus, the objective must be to motivate achievement of an optimal level of efficiency, which the structure of the current plan suggests should be 13 to 14 patients per 3.5 hour session, or roughly 15 minutes per patient encounter.

There are two primary quality control mechanisms in place that are not explicitly included in the incentive compensation system. One is the Hippocratic Oath that doctors take to serve their patients. They want to serve their patients well and be perceived as good doctors. The other is the peer reviews of files. Regarding these reviews, Dr. Samaniego said: “We don’t need to provide incentives based on the provision of quality care. We are all highly motivated to provide quality care.”

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<sup>1</sup> A short article that briefly discusses these “tensions” can be found in Wim A. Van der Stede (2007), The Pitfalls of Pay-for-Performance, *Finance & Management* 150, 10–13.

## 5. Evaluation

The current system is arguably superior to the QIIP on nearly every one of the objectives developed in the prior analysis. However, the current system may not be the best system for achieving the objectives. The most obvious feature of the current system is that it focuses almost exclusively on patient volume, whether through clinical efficiency or total scheduled hours. In this sense, it is clearly unbalanced. Yet, as discussed in the case, few other practical measures are available to provide a basis for a more balanced system. Further, the other dimensions of physician production, (e.g., education, patient satisfaction, quality of care) have difficult to quantify direct impacts, if any, on Group revenue.

Nonetheless, the current system is imbalanced even with respect to the narrow dimension on which it does focus. This can be seen by considering the financial incentive for clinical efficiency with the incentive to take extra shifts on dollars per patient encounter. The strongest per patient encounter incentive for clinical efficiency is that for increasing the average encounters per session from 12 to 13. If eight sessions per month is considered the full-time clinical load, a physician must see roughly an additional 31 patients per month ( $= 1 \text{ patient per session} \times 8 \text{ sessions per week} \times 46 \text{ weeks}/12 \text{ months}$ ) in order to qualify for the \$500 per month incremental bonus, or about \$16 per encounter. Note that the incentive for increasing efficiency from 11 to 12 or from 13 to 14 per session is half this amount and zero otherwise. By contrast, Saturday sessions above the minimum number are compensated at the market rate of approximately \$500 per shift. Even at maximum efficiency, on a per encounter basis this comes to more than \$35 per patient. Further, this additional pay is essentially guaranteed, whereas the bonus for increasing average patients per session is merely expected. Progress toward the goal early in the month can be mitigated by a slow session late in the month. Likewise, a slow session early in the month could impair the power of the incentive for the rest of the month. Clearly the existing system can be improved.

In order to attempt to optimize the system, we must first consider the constraints on any possible changes. The overriding constraint is what can be achieved through incentives. Only effort and the allocation of effort can be directly affected by incentives. Particularly for highly-skilled knowledge workers, effort is only one factor contributing to productivity. Ability, skill, and experience are important factors unaffected by incentives. In settings where intrinsic motivation is already high, the amount of additional effort that can be induced by incentives may be limited. In extreme cases, extrinsic incentives and intrinsic motivation can act as substitutes rather than complements such that relatively weak extrinsic incentives, especially monetary incentives, may actually reduce rather than increase effort. This is called the “crowding out” effect of incentives.<sup>2</sup> Consequently, any incentive-based compensation must be directed toward those aspects of production conducive to additional effort.

The second major constraint is the Group’s requirement to maintain generally positive net margins. That is, FCS cannot afford to pay more for an additional unit of output, however defined, than that additional unit of output provides in contribution. In practice, the contribution provided by any additional unit of output can only be estimated. In most cases for FCS, the additional contribution is likely to be zero. Education, administration and most services provided to managed care patients produce no direct contribution. However, market rates for moonlighting physicians provide a reasonable estimate of the upper bound for the marginal patient encounter. In order to support the stated market rate of \$500 per shift given productivity

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<sup>2</sup> See, for example, Bruno Frey and Reto Jegen (2001), Motivation Crowding Theory, *Journal of Economic Surveys*, 15(5), 589–611.

of 12 to 13 patients per shift, the upper bound can be no higher than \$38 to \$42 per additional encounter. Considering the large percentage of Medi-Cal and managed care patients in the FCS patient mix, these market rates should be reduced by 35% or more. Not surprisingly, this yields a figure consistent with the level of per patient incentive provided for additional Saturday sessions.

## 6. Suggestions

The best student suggestions usually involve combinations of the old and the new systems. They recognize that FCS must allow the doctors to earn more money to serve attraction and retention purposes, and to be able to pay the doctors more, FCS must generate higher revenues. An ideal incentive system should also motivate the doctors to engage in the behaviors that FCS values.

## **Teaching Strategy**

The proper strategy for teaching this case depends on students' prior knowledge, particularly of the health care industry. One important aspect of the industry is the use of third-party payers. The patients generally do not pay the doctors directly (except perhaps for a token co-pay amount). The payments come from an insurance company or the government. They must understand that different health insurance plans pay different amounts. Medicaid payments (provided by the government for low-income patients) are only about 30% of the amounts provided by some private insurance plans. The unique features of the industry are explained in the case, but they might require some further elaboration in class. Generally each class contains some students who are quite knowledgeable about the industry, and I use them as experts.

Beyond that, students find it easy to get into the issues in the case. Everybody understands what doctors do, and many students have strong feelings about doctor performances. Following the outline presented in this teaching note will help students to draw the links among organizational mission, goals, economic constraints, and doctor behaviors.

## Kranworth Chair Corporation

### Teaching Note

#### *Purpose of Case*

The Kranworth Chair Corporation (KCC) case describes a company that is making an important transition—from a functional organization structure to one that is divisionalized. This transition allows the case to be used to motivate discussions of a number of substantive issues, including the effects of an organization's strategy, growth, and competitive environment on its management control system design; advantages and disadvantages of decentralization; design of control systems in a divisionalized company, and design and implementation of performance evaluation and incentive systems associated with changes in organizational design and the allocation of organizational decision rights, in particular.

The case also provides some details about KCC's early experiences with the new organizational structure and management control system design, thereby providing opportunities for students to suggest possible improvements.

#### *Suggested Assignment Questions*

1. Identify the most important key recurring decisions that must be made effectively for KCC to be successful. In KCC's functional organization, who had the authority to make these decisions? Who has the authority to make these decisions in KCC's new divisionalized organization?
2. Did KCC top management go too far in decentralizing the corporation? Did they not go far enough? Or did they get it just right? Why?

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Kranworth Chair Corporation case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

*We thank Bill Lanen and Michal Matejka, both at the University of Michigan, for sharing their lecture notes for this case.*

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3. Evaluate KCC's new performance measurement and incentive system. Assuming that KCC will retain its new divisionalized organization structure, what changes would you recommend, if any? Why?
4. Assume that the R&D function is to be decentralized (given to the divisions). Would this necessitate changes to KCC's performance measurement and incentive system? If so, which and why? If not, why not?

### Case Analysis

KCC has to deal with essentially two different markets for their products. Some of their folding chair models are appealing to the mass market that can be reached through major retail chains. Patent protection is either weak or about to run out, and competition from Asian countries is growing more intense in this market segment. At the same time, KCC also produces customized chairs and chairs with extra features that seem to generate better margins and require product differentiation that is more difficult to pull off by foreign competitors.

Given the growing complexity of their business, the two owner-managers have to consider delegating more operational autonomy to other managers (especially, because of the time constraints the owners face).

### Divisionalization

To introduce the divisionalization issue, ask the students to list the key recurring decisions in the business, and then to identify who in the organizational hierarchy makes these decisions. (This addresses *Suggested Assignment Question 1*.) Table TN-1 presents such a list:

**Table TN-1**  
**Key Recurring Decisions**

Key recurring decisions?	Level responsible for making the decision?	
	Old	New
What markets to serve, such as setting product/market strategy, determining what products to sell, how to price them, and who to sell to (channels)?	C	D
What products to develop?	C	D (C?)
How and where to manufacture?	C	D (C?)
How to advertise?	C	D (C?)
How to finance (allocate scarce resources)?	C	D (C?)
How to staff (hiring, etc.)?	C	D
How to run the administration?	C	D

Key: D = division (decentralized); C = corporate (centralized)

This table illustrates that the new division managers will have considerable autonomy and will play a key role in affecting the success of their own division. For some important



decisions, however, there is a question mark as to how willingly corporate management will give up authority. Nonetheless, it seems safe to conclude that, at least, division managers have “considerable” authority over revenues and expenses, so it seems reasonable to make them profit center managers.

Instructors can then ask whether or not KCC top management went too far in decentralizing the corporation? (This is *Suggested Assignment Question 2*.) Answering this question requires that students consider both the advantages and disadvantages of decentralization.

The advantages of decentralization (creating more autonomous divisions focusing on the two distinct markets) include:

- Freeing up top management time, allowing top management to focus on the most important decisions;
- Enhancing the ability for growth by developing the management team;
- Allowing quicker (more responsive) decision-making;
- Reducing the distance between the decision maker and local information by giving authority to the managers who have the most detailed knowledge of their areas;
- Providing clearer responsibility and associated accountability;
- Making managers more cost conscious while being responsive to customer needs and market developments;
- Increasing motivation and commitment of other managers who are now allowed “to run their own show.”

The disadvantages include:

- Is corporate management willing to give up authority?
- Are the division managers “salesmen” who lack the experience to be “managers”?
- Is there a potential loss of economies of scale in key functions?
- Can some tough cost allocation problems be settled, such as for R&D and other corporate overhead support functions?
- Will division managers become too division-focused and lose sight of the corporation’s interests? (Depends how their performance is measured and rewarded—see below.)
- Is this too complex with unnecessary coordination issues? (Depends on whether or not good control systems are in place—see below.)

This list of advantages and disadvantages can then be used to address whether or not KCC’s new division managers’ authority should be expanded to include the Supply Chain and R&D functions. Students typically voice good arguments for either side (keep centralized vs. decentralize). However, the relatively small size of the company often makes students conclude

that both economies of *scale* (which are lost when these functions are duplicated) and *scope* (due to sufficient synergies across both divisions for these two functions) tilt the balance in favor of keeping these two functions centralized.

Instructors may conclude that there is no single right way of reorganizing KCC into divisions. It is likely that there will be more delegation of sales, marketing, and purchasing decisions than financing and R&D decisions.

It is important to emphasize, however, that decentralization gives rise to a fundamental control issue: How to make sure that employees (especially those who have authority to make important decisions) act in the best interest of the firm? Measuring performance of division managers and linking results to their compensation addresses this control issue. Therefore, decentralization has to go together with changes in measuring performance and compensating managers.

### Performance Measurement

The first issue is to determine what type of responsibility center the divisions are. The divisions can be evaluated as cost/revenue, profit, or investment centers.

Type of Center	Manager's Responsibility
Cost center	Delivering certain output (volume and quality as planned) and meeting its cost budget
Revenue center	Maximizing revenues using certain production output (volume and quality as planned)
Profit center	Maximizing profit of the division
Investment center	Delivering the best return on capital invested in the division

Conceptually, a revenue center is equivalent to a cost center, because in both the manager is responsible for only one side of the business (revenue or costs). A division will be a cost/revenue, profit, or investment center primarily based on what is controllable by division managers. For example, if division managers make decisions (on pricing, advertising, etc.) that affect volume and sales, but not costs, the division should be a revenue center. If both revenues and sales are largely determined by decisions of division managers, the division should be a profit center. If, in addition, division managers make important long-term investment decisions (committing corporate capital to the division), the division should be an investment center.

From the discussion above, we had concluded that the division managers have “considerable authority over revenues and expenses,” so it seems reasonable to make them at least profit center managers. But are they investment centers? To answer this question, suggest to the students to unravel the proposed performance measure: controllable returns.

The divisional controllable returns measure is defined as divisional operating income over controllable assets. The numerator of this expression, operating income, is defined as:

$$\begin{aligned} & \text{Divisional sales} \\ & - \text{COGS} \\ & = \text{Gross margin} \\ & - \text{Divisional SG\&A} \end{aligned}$$

- Allocated corporate expenses for R&D and other SG&A
- = Operating income

The denominator, controllable assets, includes inventories, accountants receivable, and allocated assets (facilities). Even though the denominator contains some elements of capital, these are primarily working capital items over which the divisions have direct control. The fixed assets portion in the denominator are essentially allocations for the cost of facilities that the divisions occupy, and it is hard to imagine that in the current reorganization the divisions will have any major authority in making any significant fixed asset investments and financing decisions. Moreover, one could even wonder why the working capital items in the denominator do not include accounts payable. The reason is that a major portion of accounts payable—paying suppliers' invoices—is still managed centrally by Supply Chain. Therefore, because of the limited investment and capital items included in the denominator, it can be concluded that the divisions are essentially profit centers; not investment centers.

Instructors may also want to ask the students why, then, are R&D and other corporate overheads (in the numerator) as well as facility costs (in the denominator) allocated to the divisions even though the division managers seem to have less than perfect control or less than full authority over these items? This issue can lead into a discussion of the differences between authority and accountability. Managers are generally held accountable for results in areas where they have authority. But the division managers' bonuses are based on performance measured in terms of operating profit after some overhead allocations, some of which are allocated rather arbitrarily (such as the 50/50 split of R&D expenses). The primary reason is that allocating these costs gives the division managers information as to what services are being provided for them and it gives them some power to complain if the size of the allocations becomes too high. And if, say, R&D were not allocated, the division managers might be tempted to make less than economical use of these services; that is, be tempted to *over*-use them. And if the cost of facilities were not allocated, corporate management might find itself quickly in a situation where the division managers claim they have run out of space.

## Incentive Systems

Division managers' compensation depends on the extent to which they meet certain performance targets; in this case the target set for their divisional controllable return. This involves a number of decisions. In the case of KCC, a private company, the following are most important:

- The proportion of salary versus performance-dependent compensation:

In KCC, division managers [lower-level managers] earn a bonus equal to 30 [15–20] % of salary if the controllable return target is met. This seems appropriately “leveraged,” providing enough incentives to have impact, yet not imposing undue risk on the managers.

- The proportion of individual versus firm performance linked to compensation:

In KCC, 75 [25] % of the bonus is based on divisional [corporate] controllable returns. This also seems appropriate in order to at least maintain the division managers somewhat concerned about the impacts of their actions on the corporation's well-being.

- The proportion of formula-based versus subjectively-determined compensation:

If performance exceeds target, the bonus could be increased by up to 50 % at the discretion of top management. Although there are no guarantees that the discretionary bonus will be awarded (which imposes some risk on the division managers), it does signal that opportunities for exceeding target should not be left unearned or “gamed” into the next evaluation period when they again become bonusable.<sup>1</sup> The effectiveness of this clause will critically depend on how top management uses its discretion. If the division managers feel that they are appropriately rewarded for exceeding target, despite having no guarantees due to the discretion involved, this feature is likely to have good effect.

However, there is probably also a more pragmatic reason why KCC introduced the discretionary bonus feature for over-target performance. At the time of the reorganization, KCC had no experience with the new incentive system and so it was wise to try and protect the organization against a faulty compensation plan that KCC might possibly not be able to afford.

Moreover, finally, the discretion also protects the organization from paying bonuses for the so-called “windfall performance.”

- How to set the performance target:

In KCC, the division managers earn their whole target bonus only when they meet target. There is no “minimum performance threshold” (e.g., 80 % of target) at which managers start earning a portion of their target bonus (e.g., 60 % of target bonus). This means that the whole bonus rides on meeting target, which creates strong incentives for managers to meet the target (hopefully only through “legitimate” decisions, as opposed to “managed” performance). This also implies that here is a strong *disincentive* to “just not meet target;” that is, not meeting target by a small margin is as bad as not meeting target by a wide margin. This creates temptations to shift performance into the next period when the target for the current period is not met, which is also known as “taking a bath.”

In sum, to avoid potential gameplaying behaviors, corporate management would be wise to consider at least some smoothing of the all-or-nothing bonus associated with meeting target, such as by introducing a minimum performance standard at which some bonus would be earned.

To conclude the discussion pertaining to ***Suggested Assignment Question 3***, we believe that the evaluation of KCC’s performance measurement and incentive system should be quite favorable. There are some issues, but these could be quite easily addressed relatively soon in the process of the reorganization (perhaps already in the next evaluation period).

If time permits, instructors might ask whether a decision to decentralize the R&D function would necessitate changes to KCC’s performance measurement and incentive system. (This is ***Suggested Assignment Question 4***.) One difference would entail that R&D would no longer have to be allocated because the divisions now have full authority over their own R&D spending. Might this lead to divisional “myopia,” however, where the division managers might not spend as much on R&D as they should for the sake of attaining their annual controllable return target? (Maybe yes.)

Related, does the current 50/50 allocation to each division of the centralized R&D expenditures distort the divisional performance evaluations? Often much to the students’

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<sup>1</sup> For example, see M. Jensen, “Corporate Budgeting Is Broken—Let’s Fix It,” *Harvard Business Review* (November 2001), pp. 95–101.

surprise, it does not! The allocation amounts for corporate R&D are quite well known at budget time (based on the corporate budget for R&D), and so are, by implication, the allocated amounts to the divisions. Therefore, the allocation of corporate R&D, even though it may seem distorted, can be fully impounded at target-setting time and therefore should not in any material way affect the divisions' performance evaluations, which involve a comparison of actual performance vis-à-vis target.

## Early Experiences

Any change in organizational structure needs time to become fully operational. It is important to watch for signals suggesting control failures. These can occur in essentially two ways: poor intra-divisional performance (a well-designed performance measurement system should prevent that) or failures to increase firm profits through inter-divisional cooperation (the risk is that division managers are myopically focused on divisional results and fail to exploit synergies maximizing overall firm profit).

While KCC benefited from the new divisional structure, there are some signs of what possibly are divisional failures to cooperate:

- Conflicts about R&D priorities;
- Loss of economies of scale regarding ad agencies;
- Potential conflicts about the design of the supply chain function.

One way to address these issues is to intervene centrally (the owners could decide which ad agency to work with). However, this would limit the benefits of decentralization and why the divisions have been created in the first place.

However, there are a number of other ways to adjust the new organizational structure to increase the incentives to cooperate if needed:

- Change cost allocations (make divisions pay only for what they ordered);
- Change the performance measures (include non-financial performance measures to reduce the myopic focus on short-term results);
- Increase the weight on firm (versus division) performance in incentive compensation (consider stock-based incentives if possible);
- Reduce the difficulty of short-term financial results; and,
- Reward coordination through subjectively determined compensation awards.

Moreover, KCC chose to promote internally to fill the divisional management positions. Even though these managers may initially not have all the requisite management skills, they do have the experience and do exhibit, possibly, stronger company loyalty. Instructors may ask, rhetorically: Which is better—internally-promoted managers who know the business but need to develop their management skills, or externally-hired managers who know management but need to learn the business?

Moreover, finally, instructors can conclude by asking: Can a company operate effectively with absentee owners? Most companies do; they are called shareholders! With strong corporate and divisional management and good control systems, the business should run effectively. Is KCC there yet?

## **Pedagogy**

As with most case classes, instructors must make a decision as how to structure to make the discussion. However, we recommend following roughly the same structure as presented in this teaching note to allow sufficient discussion time spent on all the critical elements of a financial results control system in decentralized organizations, including responsibility centers, performance measurement, and incentives.

Following this structure will allow instructors to conclude that the Kranworth Chair Corporation case illustrates:

- The benefits and costs of decentralization—the delegation of decision authority to subordinates;
- The definition of responsibility centers and the appropriate performance measures for different types of centers; and,
- The role of incentive compensation in a management control system.

## Zumwald AG

### Teaching Note

#### ***Purpose of Case***

This case describes a transfer pricing issue that is common in decentralized, divisionalized firms. The case raises issues about internal pricing and, more generally, the operation of a decentralized management structure.

#### ***Suggested Assignment Questions***

1. What sourcing decision for the X73 materials is in the best interest of:
  - a. The Imaging Systems Division?
  - b. The Heidelberg Division?
  - c. The Electronic Components Division?
  - d. Zumwald AG?
2. What should Mr. Fettingler do?

#### ***Case Analysis***

The suggested assignment points students in the right direction. Zumwald's ISD division is sourcing displays for its X73 system. The division solicited three quotes. The lowest quote, for €100,500 was from a British company, Display Technologies Plc. Another quote, for €120,500, came from a Dutch company, Bogardus NV. The high quote, for €140,000, came from Zumwald's Heidelberg Division.

Should ISD choose the Display Technologies quote? Possibly yes. However, the Display Technologies quote causes some worries. One is about quality. Display Technologies is

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*Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Zumwald AG case.*

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a new entrant to the market, and it has not yet had a chance to demonstrate the high quality that Bogardus, and presumably Heidelberg, has demonstrated. Moreover, the Display Technologies bid may be a low-ball bid to enter the market. For subsequent orders, they might have to raise the price significantly to maintain viability. This could cause ISD to incur some costs of switching suppliers at some time in the future. However, the manager of ISD should be aware of these issues, and he decided to choose the Display Technologies quote.

The issue in the case arises because the manager of Heidelberg complained about not getting the ISD order. His arguments are the following:

1. Zumwald is better off if Heidelberg supplies the displays to ISD. Students should do the calculation to understand this conclusion.

The Heidelberg quote to ISD is better for Zumwald taken as a whole because it includes some contribution both for Heidelberg and for ECD, Zumwald's internal electronic subassembly supplier. The variable costs for Heidelberg are €50,000. The fixed costs are not relevant because Heidelberg is not operating at full capacity. Therefore, there is a contribution of €90,000 to Heidelberg in the €140,000 quote to ISD. Students might question the treatment of labor costs as fixed on the downside, but this is common in Germany.

In addition, there is a contribution of €12,600 for ECD built into this quote. This is ECD's internal price of €21,600 minus the variable costs of €9,000. (ECD is also operating below capacity.)

The advantage to ISD of sourcing from Display Technologies rather than Heidelberg is €39,500. This is far smaller than the total contribution to Zumwald divisions of €102,600 that would be foregone if Heidelberg does not get this order. The difference is €63,100. Financially, Zumwald is clearly better off if ISD sources the displays internally.

This calculation can be shown in different ways. Another method is to consider the net cash outflow to Zumwald of the sourcing alternatives. If the displays are bought from Display Technologies, the cash outflow for the displays is €100,500. If they are sourced internally, the total Zumwald cash outflow is:

Cash outflow if sourced from Display Technologies. ....	€100,500
Cash outflow if sourced internally:	
Heidelberg variable costs excluding the ECD-supplied materials.....	€28,400
ECD variable costs .....	€9,000
Difference .....	<u>€37,400</u>
	<u>€63,100</u>

2. Heidelberg engineers helped ISD develop the X73. Heidelberg was reimbursed for the cost of those engineers, but it earned no profit for this work. Does this assistance imply a partnership that would include future sourcing of parts?

Students presenting this analysis showing the advantage to Zumwald of internal sourcing should be asked whether this means that Mr. Fettingger should order ISD to source the displays from Heidelberg. They will almost assuredly say yes. However, then the issue is the price at which the transaction should be made.



The case has enough information to show that this X73 business promises to be highly profitable for ISD:

Revenue for one X73 system.....	€340,000
Non-display material costs .....	€72,000
Variable conversion costs .....	<u>€26,300</u> ..... €98,300
Contribution before display costs .....	€241,700
Fixed conversion costs.....	<u>€117,700</u>
Gross margin before display costs.....	<u>€124,000</u>
ISD contribution if sourced from Display Technologies.....	€141,200
ISD contribution if sourced at Heidelberg's price of €140,000.....	€101,700

Clearly there is room to force ISD to pay Heidelberg more than the Display Technologies' price. That extra cost could provide additional margin to Heidelberg and ECD. However, alternatively, any price greater than €37,400 provides a contribution to Heidelberg and/or ECD. Why shouldn't Heidelberg shave its price to get this internal business? Moreover, if Heidelberg shaves its price, then it might well ask ECD to shave its price below its normal 20% mark-up. Therefore, in some sense, these transfer prices are just moving profits from one division to another. What is fair to all parties?

Heidelberg's manager, Paul Bauer, claims that he has been pleading with his salespeople not to shave prices, that he needs full margin business in order to achieve his plan. Does Mr. Bauer just not want to acknowledge the price competition in this segment of the market? Is he ignorant of the marginal cost and contribution margin concepts? Should he be fired?

Or is Mr. Bauer merely willing to lose this business in order to emphasize the importance of his pricing policy to his salespeople? This latter possibility can be illustrated with the following hypothetical figures:

Price policy	Price (000)	Volume	Unit Contribution	Total Contribution
Full price	140	70	90	6,300
Cut price	100	100	50	5,000

Maybe because of market conditions and customer price sensitivities, Heidelberg is better off giving up some business to retain higher margins, even though they are operating in a below-capacity condition.

So what should Mr. Fettinger do? Mr. Fettinger should probably listen to the arguments in order to learn the managers' thinking processes? Are they all aware of the key facts in the situation? Does Mr. Bauer, in particular, understand the concept of marginal cost pricing and contribution margin?

If the managers are all making rational arguments, then strong arguments can be made here for having Mr. Fettinger do nothing. Zumwald operates in a highly decentralized fashion.

Why not let it continue to do so? Let the managers have their autonomy and freedom of sourcing. If there is a deal to be made, let the managers work it out themselves. If Mr. Fettinger gets involved here, he will probably also have to get involved in many other similar disputes. If this deal were a more substantial part of Zumwald's total business, then a stronger argument could be made for intervention. However, this deal, by itself, is worth less than 5% of each division's revenues. Heidelberg can probably earn the business by cutting its price to Display Technologies, but maybe it is not in their best interest to do so, even though internal sourcing of this deal seems to be in Zumwald's best interest.

The final question that can be explored is the systemic question. Is the Zumwald responsibility center/performance measurement system faulty in that it motivates managers to make decisions that are not in the best interest of the corporation as a whole? There is no easy answer to this question. In most situations where local knowledge and fast decision-making is important, a highly decentralized system has great advantages. However, with decentralization comes risks of suboptimization. This case provides one common example of suboptimization. Zumwald could establish a transfer pricing policy to try to induce better transfer pricing and, hence, sourcing decisions. Such a policy could require internal transfers to be, for example, at best outside market price, or at full (or variable) cost plus a normal markup. But would such policies really lead to better organizational decision-making?

### ***Pedagogy***

This case is relatively short and straightforward. Students do not need a lot of guidance to reach the conclusion that Zumwald is better off if the sourcing is done internally. Then, we suggest letting the students provide suggestions as to the best transfer price. The learning will come from the discussion of alternatives. Instructors should only intervene if students fail to recognize the advantages of decentralization.

## Global Investors, Inc.

### Teaching Note

#### ***Purpose of Case***

This case was written to illustrate a transfer pricing problem in a service setting, here an investment management company. The issues and solutions are not as obvious as in a manufacturing setting where one division produces parts that are transferred to another division for further processing.

The case is a disguised version of a real conflict in which emotions were running high. The case exposes students to a broad range of issues that can be raised when negotiating transfer pricing. These include cost allocation methods, managers' interests and perceptions, organizational roles and conflicts, taxes, ownership structure and manager compensation, and ethics. The case also illustrates that there are often no obvious, clean solutions to transfer pricing problems.

#### ***Suggested Assignment Questions***

1. What transfer pricing model is in the best interest of Global Investors, Inc.?
2. If management evaluation and compensation were the primary purpose of the transfer pricing system, how should the choice of the transfer pricing method be made?
3. How should Bob Mascola run the transfer pricing task force meeting that will include GI's CEO?

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California), Tatiana Sandino (University of Southern California), and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Global Investors, Inc. case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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## Case Analysis

### The Company's Profit Model

Addressing the transfer pricing problem requires an understanding of how Global Investors (GI) creates value. The basic business model is essentially as follows:

1. Sales to institutional investors were done primarily by corporate sales staff. Almost all sales to individual investors were made by independent broker/dealers.
2. Deciding how to invest the clients' money was largely a centralized function performed by highly-trained specialists in New York or contractors hired by corporate. The local subsidiaries had people who traded financial assets following headquarters' guidelines.
3. Some corporate specialists focused on improving cost efficiencies, such as by generating economies of scale in trading activities and by improved use of technology.

However, then the situation gets a bit muddled:

1. Client service was largely a local function. If the client was based in the UK, the service was performed primarily by the London office.
2. Two of the subsidiaries—those based in Tokyo and London—had built up small staffs of advisors who specialized in providing investment advice for clients wanting to invest locally and who developed local funds which did not necessarily follow the investment strategies developed by headquarters.

However, in all cases, local clients were assigned a New York-based client service contact and received investment information from GI headquarters. This raises the question, then, of how much value is being provided by the local subsidiaries vs. headquarters? It is difficult to tell without doing a study. The relative value created by each function and each location could vary markedly across clients.

### Transfer Pricing Alternatives

#### *Alternative 1—Current transfer pricing system*

The case states that GI's current measurement system treated the subsidiaries as cost-focused profit centers, instead of mere cost centers, because each is assigned a revenue figure (Reimbursement from Parent) that provides a 110% reimbursement of their direct controllable costs. Thus, on the operating income line, each subsidiary looks like it is earning a profit (see case Exhibit 5).

The current measurement system provided some real advantages for GI. It ensured that the subsidiaries would look financially sound to local regulators and clients. It gave the impression to tax authorities that each subsidiary was earning a profit. Moreover, it was simple.

However, the current system had some drawbacks. Alistair Hoskins, CEO of the London subsidiary, was the most vocal in pressing for change. He seemed to have several concerns. He was concerned that if the London subsidiary was ever sold, it might be valued simply at a multiple of earnings or EBITDA. He believed that the subsidiary generated more profit than it was given credit for. He was also concerned that GI would face serious

consequences if the local regulatory authorities learned that the subsidiaries' real profits were higher than that were being reported. To date, GI had never had to undergo a tax audit, so the tax authorities had never detected this problem.<sup>1</sup>

The transfer pricing alternatives proposed, which are outlined in detail in the case, are remarkable in their arbitrariness.

#### *Alternative 2—Hoskins' first proposal*

Hoskins' first proposal was to allocate revenues to subsidiaries based on a proportion of the assets under management and to have the subsidiaries pay corporate a royalty of 50% of revenues for the use of their trading strategy advice. No justification was provided for the 50% royalty rate. This measurement method would make all the subsidiaries look hugely profitable. That, in itself, would provide some tax savings for GI because the New York tax rates were higher than those GI faced in any other tax jurisdiction.

#### *Alternative 3—Davis' first proposal*

Jack Davis, the corporate Operations VP, rejected Hoskins' method. He argued that to a large extent the subsidiaries were just following instructions from headquarters. Moreover, many of the funds the subsidiaries were managing belonged to New York clients. He proposed instead to allocate revenues based on the *origin* of the clients, not the current location providing the service. This transfer pricing method would cause all the subsidiaries to report large losses on their operating income line.

#### *Alternative 4—Hoskins' second proposal*

Hoskins then did some industry benchmarking and found that the "industry standard" was to split fee revenues equally between Client Services and Investment Management. We inquired GI management as to the rationale behind this standard, and no one could explain it to us. The primary rationale seemed to be a general recognition that both functions created value, but that it was too difficult or too costly to measure the relative proportions of value creation. Hoskins interpreted the method to mean that the Client Service revenue should be allocated based on the origin of the clients, and the Investment Management revenue should be allocated based on a proportion of the assets being managed. He proposed still to pay a 50% royalty to corporate for the Investment Management revenue. This alternative, too, would have made each subsidiary look quite profitable.

#### *Alternative 5—Davis' second proposal*

Davis' counter-proposal tweaked with this 50–50 proposal. He proposed to leave all of the Investment Management revenue in New York, since the investment strategies were almost exclusively developed at headquarters. However, the subsidiaries would be reimbursed for their Investment Management-related costs, plus a 10% mark-up. This alternate would have caused most of the subsidiaries, including London, to report losses, as is shown in case Exhibit 6. Not surprisingly, Hoskins rejected this approach.

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<sup>1</sup> This was a significant business risk for GI because if an audit would take place, the authorities would learn that the profits earned in each tax jurisdiction were not being generated by a series of "arm's-length transactions." Is it ethical for GI managers to be willing to report clearly flawed measures and to tolerate this risk?

### *Other Alternatives*

Many more possibilities can be discussed. It might be productive to entertain student options and to see how those other transfer pricing options impact the operating income reported by the subsidiaries (modifying case Exhibit 5). Here are some alternatives that students might suggest:

- Utilize Hoskins' second proposal, but allow for the negotiation of the royalty rate provided to headquarters for their trading strategy advice. Royalty rate adjustments could be based on the degree of customization of the trading strategies to local client needs.
- Utilize Davis' second proposal, but give the subsidiaries full recognition of the investment management revenue generated by the local funds that follow trading strategies that differ from those developed at the headquarters.
- Recognize the full revenue at the subsidiary level and search for market data (such as the Lipper data for investment management and sub-advisory fees) to determine the rate that the subsidiaries should pay to the headquarters for their investment strategies and advisory services.<sup>2</sup> This method also would provide evidence of an arm's-length relationship. But would such an approach be (too) costly to implement (such as due to extensive benchmarking data collection efforts)?

### *Sidebar*

If instructors wish, and time permits, students could also be asked to discuss the cost allocations from cost centers to business units. Useful proposals might include the following:

- Allocate costs directly from cost centers to business units, once only (thus eliminating allocations from cost centers to cost centers). This should simplify the calculations and remove the need for using the more complex reciprocal allocation method to arrive at the final cost allocations to each business unit.
- Rather than rely on the individual judgment of cost center managers, base cost center allocations on actual business unit usage, which could be documented in a Service Level Agreement (SLA) between the cost center and the affected business units. An added feature of SLAs is that they could be used as part of the due diligence process for the Global Transfer Pricing taxation review by GI's auditor, which must be carried out before the arrangements are finalized, to ensure the taxation consequences are satisfactorily dealt with.

The first proposal emphasizes simplification; the second one documentation for tax compliance.

In addressing **Suggested Assignment Question No. 1**, it is important to have the students recognize all of the purposes served by the company's performance measurement system and, in particular, its transfer pricing system, including:

- a. Reporting to regulators (income tax authorities and financial regulators);
- b. Possible valuation of subsidiaries (e.g., multiple of EBITDA);

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<sup>2</sup> [http://www.lipperweb.com/products/prod\\_category\\_list.asp](http://www.lipperweb.com/products/prod_category_list.asp).

- c. Management evaluation and compensation (although that seems not to be a major purpose here);
- d. Understanding the subsidiaries' performance to improve strategic decision-making;
- e. Aligning subsidiary incentives to the overall strategies and goals of the corporation, mitigating any conflicts between generating value for the subsidiary and achieving the broader corporate goals. Corporate strategic considerations are particularly important in this company as recognizing the value-added by subsidiaries of developing local funds may be counter-productive given that GI's differentiation strategy is focused on following corporate trading strategies developed by prominent academics. Do the GI top executives prefer to discourage the development of local funds following other strategies?

It must also be recognized that the subsidiaries' financial reports can affect managers' self-esteem and sense of fairness. Failure to please them in those areas can create conflict and demotivation. Deciding which purposes to emphasize can suggest a preferred alternative.

If c. (in the list above) were a more important purpose of the measurement system, how should the choice of transfer pricing method be made? (This is **Suggested Assignment Question No. 2.**) This is a difficult question to answer. With the current system, there would seem to be a tendency for subsidiary managers to increase their direct controllable costs since those costs are reimbursed 110% by corporate. However, corporate managers would certainly have visibility into those costs and would have ways of controlling them. Choosing a system that allocated revenues based on a proportion of the origin of the clients or the investment services provided could have significant effects on the subsidiaries' actions and, hence, organizational teamwork.

### The Process

It is useful to have the students note how expensive this process was. The task force was comprised of a high-level group of executives who invested a significant amount of time in the meetings and preparations for the meetings over a seven-month period of time.

In the real company, Gary Spencer, GI's CEO, just wanted this issue to go away. He did not want to change the system, for the reasons discussed above. He agreed to have a task force address the issue just to appease the subsidiary managers who were complaining.

In answering **Suggested Assignment Question No. 3**, students need to think about what outcome Mascola might value. With his boss in the meeting, Mascola might try to direct the group toward a no-change outcome. However, perhaps the complaining subsidiary managers need to be appeased. Hoskins' acceptance of the various alternatives seems to be related to the level of the operating profits reported in London. Thus, some minor compromise might be entertained to allow more profits to be shown in the subsidiaries in the hope that Hoskins will stop voicing his objections.

An alternative is to commission a study to try to determine just how much value is created in the Client Service and Investment Management areas by personnel in headquarters vs. the local subsidiaries. However, this would be difficult and costly, and it is unlikely that Spencer would agree to spend the money for this study.

In the real company situation, Hoskins came to understand Spencer's indifference, and he realized that he did not have the power to sell his proposed model(s). Further, unless and

until he increased the size of his client base, he was better off with the current, cost-plus system than with the last system proposed by Davis. Therefore, he backed down. No change was made.

### ***Pedagogy***

As with most case classes, instructors must make a decision as to how structured to make the class. With an experienced group of students, just asking the suggested assignment questions should stimulate an active discussion. With a less experienced group, the instructor may want to address the points raised in this teaching note in order.





## Royal Wessanen NV

### Teaching Note

#### *Synopsis*

The Wessanen case is intended to allow students to discuss some important features of an essentially “standard” planning and budgeting system in a relatively large, diversified, multinational food company. However, a particular issue arose because the company needed to decide whether to implement a major budget revision only shortly into the respective fiscal year to which the approved budget applied. The required revision was convoluted in its triggers because the firm was facing both hard economic times due to a recession and some turmoil at the top management level at the same time that it was undergoing strategic change involving a product/market portfolio rethink and related divestments. This allows students to discuss and evaluate the rigidity/flexibility of budgets and its consequences, as well as to ponder ways in which budget revisions can be effectively implemented when they arise, as well as the conditions (such as based on the magnitude of the required revisions) under which they should go ahead (or should be resisted).

#### *Case Approach*

The Wessanen case can be taught entirely on its own but also as a follow-up to Citibank Indonesia, a “classic” Harvard case which was included in prior editions of the book. This section elaborates the rationale for each approach.

- **Wessanen as a follow-up to Citibank Indonesia**

Once a case teacher has identified a pertinent case, and often soon after he or she gets experienced at teaching it, the case quickly begins to age. Indeed, the cases get one year older every year. My experience with students of the millennial generation is that this “aging of cases” in their fast-paced worlds is pressing as ever in that it sometimes shows up as a critique in student evaluations. Yet, some issues in management control (such as gaming behaviors in a budgeting context) remain equally relevant as ever. How can one then marry relevance (which students quickly, but often misguidedly, equate with an issue being “new” or “recent”) with

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*Professor Wim A. Van der Stede (London School of Economics) prepared this teaching note for the sole purpose of aiding classroom instructors in the use of the Wessanen NV case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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“aging” cases? The use of the Wessanen case in conjunction with the Citibank Indonesia case offers a particularly compelling approach that has worked effectively for me in overcoming this issue, or even better, in “leveraging” good materials from older cases into the present time.

In other words, one effective way to use the Wessanen case is to rekindle relevance in a very interesting but older case (Citibank Indonesia) for which there is no obvious new replacement case readily available. My approach with this particular set of cases, which I will set out below, has been field-tested four times (in February 2011, 2012, 2013, 2014) with a group of students who take a *Register Controller Opleiding* (essentially a Chartered Controllers program) at Erasmus University in Rotterdam. This is a group of about 40 postgraduate students who are currently accountants/auditors/controllers in companies (both public and private, for-profit and non-profit), and who aim to take further education to receive a certificate of RC (“Register Controller”, or loosely translated, Chartered Controller). Their average age is about 30 years, several of whom work for well-known firms like ABN Amro, AON, Capgemini, Heineken, Heinz, IKEA, ING, KPN, Mexx, PwC, Shell, TNT Express, and Unilever.

These students are not only millennials, they also have little patience for seemingly irrelevant materials, let alone what they might perceive as “old stuff” which they are likely to believe to experience when discussing cases with dates in the text referring to the '80s, as indeed they were only kids at that time.

Yet, the Citibank Indonesia case is inarguably one of the best cases to stimulate a lively discussion about the budgeting process in organizations and a myriad of issues related to stretch targets. Thus, we have an effective case here for which there is not an obvious newer replacement, but it is old (although still as relevant today as it was then), and getting one year older every year. How, then, do I go about this? For the RC program mentioned above, I have a morning and afternoon session.<sup>1</sup> My schedule for the day is as follows:

09.30–10.15	Introduction to Budgeting
10.15–11.30	<i>Citibank Indonesia</i> Case Discussion
11.30–11.45	Break
11.45–12.05	<i>Citibank Indonesia</i> Video
12.05–12.30	Summary, Conclusions, Takeaways
12.30–14.30	Lunch
	Preparation in Groups of <i>Wessanen NV</i>
14.30–15.45	<i>Wessanen NV</i> Case Discussion
15.45–16.15	Mr. Sjoerd Schaafsma, Reflections on <i>Wessanen NV</i> and Q&A
16.15–16.30	Summary, Conclusions, Takeaways

In short, the morning is an introduction to budgeting and Citibank Indonesia; the afternoon is Wessanen NV. Both the morning and afternoon have the “live” intervention of the key actors in each case: Mr. Mehli Mistri for Citibank Indonesia on video in the morning; Mr. Sjoerd Schaafsma in the afternoon in person in class.

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<sup>1</sup> The *Register Controller* students are part-time students who attend class one day per week, which is typically devoted to a single subject on that day.

When students come back for the afternoon session for the in-class discussion of Wessanen NV (14.30–15.45), Mr. Schaafsma sits in the room, but the students don't know who he is. They perhaps think he is a teaching observer, a prospective student, an inspector, or whoever—who knows. I don't introduce him at all. He is just there. This is to make sure that the students speak freely while discussing the case. Mr. Schaafsma meanwhile takes notes so that when he takes the floor at 15.45, he can start with some observations about the comments that the students have made about the case during the open case discussion; clarify some misunderstandings; and so on. Of course, at 15.45, I do introduce him to the students as “the real” Mr. Schaafsma, very much to the students' positive surprise and awe to have the “real person” in the case right there in front of them.

But aside from this surprise effect, and then the benefit from “hearing it straight from the horse's mouth,” the questions that we discuss for Wessanen NV nicely tie back to the Citibank Indonesia case. (The assignment questions are in the section below, see Q1 and Q2.) This has the effect that if I had only done Citibank Indonesia, students might not quite have been sure that the issues we discussed were perhaps tainted with problems from a different era, like “you know, back then companies didn't really have the information systems and data crunching models to eradicate budget slack regardless of what Mr. Mistri claims about the difficulty of his budget targets.” But by doing Wessanen NV, all of the fundamental issues appear to be still alive and well. The assignment questions for the Wessanen NV discussion are designed to ensure that this comes out strongly.

Clearly, although the Wessanen NV case is not a “replication” of the Citibank Indonesia case, both cases hit the same sorts of notes and issues in a similar but not identical budgeting context, the benefits of which are twofold:

1. First, the students learn to *appreciate the all-important behavioral issues involved in budgeting*, and they do so in two different cases in two different companies relating to two different time periods, and that while each of the cases has its own nuances. The Wessanen NV case, for example, allows an opportunity to discuss “scenario budgeting”—a different approach to try and bring flexibility into budgeting to address the sometimes-devastating effects of “fixed targets”—and that while both cases are dealing in their own way with the same fundamental issue: that of a significant budget revision.
2. Second, the combo discussion allows to *rule out the effect of the passing of time on the fundamental issues faced*, despite scenario budgeting and the use of sophisticated budgeting technologies like Hyperion as detailed in the Wessanen NV case. Combined then, the “new” case brings out not only its own issues in the context of a budget revision, which creates learning about these budgeting issues on its own, it also makes the issues that were the key learning points from the Citibank case *timeless*. In my experience, this has had quite a strong effect: a new case with its own context and learning points on a similar but not identical budgeting issue that at the same time makes the key learning points of an older case, also with its own nuances, while being effectively illustrated by conceptual analogy in the present time.

And other than noticing from the video of Mr. Mistri to the live presence of Mr. Schaafsma that perhaps hairstyles, tailoring, and the width of ties may have changed, students realize that Mr. Mistri and Mr. Schaafsma are actually still trying to achieve the same thing despite their separation by three decades: good management control through the effective use of budgeting in large, decentralized firms. The “old” and “new” thus merge; they fundamentally illustrate the same problem; this is the old *and* new, not the new superseding, and thus obsoleting, the old. The old gets leveraged by the new.

Of course, and importantly, most instructors of these cases (except perhaps those in The Netherlands) will not be able to get Mr. Schaafsma come to class, but that would cause only a minor loss of mainly a “wow” benefit. The two cases can still be taught together to chiefly achieve the main objective as set out above: leverage a punchy older case’s relevance by pairing it up with a new case in roughly the same but not necessarily identical topic area or issue. One could (and most instructors will) even do without showing the tape of Mr. Mistri for the Citibank Indonesia case, and just teach the two cases somehow back to back. And this would not even have to be on the same day as my schedule above affords in the *Register Controller* program.

All told, and without loss of effectiveness even without the personal interventions of the key actors in the respective cases, instructors are more likely to do two sessions in succession in regular weekly classes, as long as the Wessanen case discussion follows the Citibank Indonesia case discussion and the instructor does not waste the opportunity to “make the connections” as indeed the assignment questions for the Wessanen case are designed to make possible.

I hope instructors might deem it worthwhile to experiment themselves with this approach (or some variation of it). After all, many good cases are too good to waste merely due to the passing of time, if indeed they address what are still pertinent issues. But this is an approach to merely rekindle old cases. It is by no means an attempt to not be up-to-date. When cases are old and obsolete, they must go. If that is the case, I am resolute to throw them out, as we owe it to our students to teach them relevant materials. But not all old cases are obsolete, yet some of the best old cases are difficult to rewrite because of the unique opportunity they struck at the time of their writing. However, pairing them with a new case in clever ways can make them timeless, if indeed the issue they address is timeless, too.

- **Wessanen as a stand-alone case**

The Wessanen case can, and likely will by many instructors, be taught just like any other case: on its own. The teaching guidance below can easily be applied with such stand-alone use in mind. But even so, instructors might find it useful to check the teaching notes for the Citibank Indonesia case, which I will not repeat here even for the other approach where the Wessanen case is taught following the Citibank Indonesia case.

### **Suggested Assignment Questions**

During the near day-long program outlined above, I have a timeslot where students are asked to prepare in groups for the afternoon session focused on the Wessanen case. The instructions for this are literally as follows:

Be prepared to make a group presentation, effectively getting across the key points of your group analysis structured around the questions below. For the presentation, you may designate a spokesperson for your group to make the presentation, although everyone in the group should stand ready as a backup for the presenter for questions from the audience or by the instructor. Only two groups will practically be able to present, but all groups should nonetheless be prepared to present if called upon. Selection will be random. Any visual materials (such as PowerPoints) should be primarily strong on content, although the expectation is that your findings and analyses will be professionally presented.

Please address the following questions:

1. Compare and contrast the planning and budgeting processes at Citibank (Indonesia) and Royal Wessanen. How are they the same, and how are they different? What effects may any differences have on any of a number of outcomes (such as setting accurate performance targets, any possible dysfunctional behaviors by those subject to budget-based performance evaluations, and so on)?
2. The budgets at both Citibank and Wessanen in their respective year involved a budget revision. Discuss how those revisions were handled in both cases? If any differences in the way they were handled, again discuss the possible impacts on any of a number of outcomes.
3. Critically analyze and evaluate the way Wessanen ended up handling the budget revision through its so-called “hurricane scenario” budget revision. Did they handle it well? What could or should they have done differently, and why?
4. Discuss how a more “permanent” rather than this “one-off” scenario budget could be instituted as an ongoing budgeting process feature. How should that be done? What would be the advantages of doing so? Disadvantages?<sup>2</sup>

When the Wessanen case is taught on its own, these questions can be rephrased as:

1. Analyze and evaluate the planning and budgeting process at Wessanen in terms of when it starts; its duration; who is involved; its format; its nature (e.g., top-down/bottom-up; degree of target difficulty); its overlap with other organizational processes (such as incentive systems); its effects and side-effects (e.g., propensity for slack, gaming)?
2. The budget at Wessanen involved a budget revision in that given year. Discuss how this revision was handled and the possible impacts of how it was (or could be) handled on any of a number of outcomes (e.g., target pressure; budget commitment).
3. Critically analyze and evaluate the way Wessanen ended up handling the budget revision through its so-called “hurricane scenario” budget revision. Did they handle it well? What could or should they have done differently, and why?
4. Discuss how a more “permanent” rather than this “one-off” scenario budget could be instituted as an ongoing budgeting process feature. How should that be done? What would be the advantages of doing so? Disadvantages?<sup>2</sup>

## **Case Analysis**

### **Assignment Question 1**

The first assignment question is essentially about the nature of the budgeting process, its features, effects, and possible side-effects.

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<sup>2</sup> Students could be assigned the following background reading to go with this case: W. A. Van der Stede and T. Palermo, “Scenario Budgeting: Integrating Risk and Performance,” *Finance & Management*, no. 184 (January 2011), pp. 10–13.

### Comparison with Citibank

Citibank	Wessanen
<ul style="list-style-type: none"> <li>• Mr. Mehli is on OPCO side</li> <li>• Start of process with corporate guidelines and instructions</li> <li>• Starts in July</li> <li>• Use of spreadsheets plus text documents for additional narrative</li> <li>• No specific corporate targets</li> <li>• Stronger boundaries from sovereign risk limits (probably unique to the financial services sector)</li> <li>• No strategic updates</li> <li>• Review process consultative and presumably collegial, constructive</li> <li>• 70% max incentive pay</li> <li>• 30–35% normal/expected payout</li> <li>• Incentives are based 30–70 on the achievement of corporate financial–entity financial targets, where it appears to be mostly (exclusively) formulaic, i.e., based on target achievement</li> <li>• New, inexperienced team, high-turnover</li> <li>• Corporate occasionally ups the targets</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Schaafsma is on Corporate side</li> <li>• Idem</li> <li>• Starts in September—shorter period (maybe greater use of technology allows faster communication and shorter processing times)</li> <li>• Use of Hyperion plus PowerPoint for additional narrative</li> <li>• Specific corporate targets on three top KPIs (Net Sales, EBIT, Working Capital)</li> <li>• No strong boundaries from risk management, although upside potential and downside risks featured in the narrative</li> <li>• Two-year strategic update; closer links with strategic plan generally than in Citibank</li> <li>• Review process “brutally honest” although also intended to be consultative with input from lower-level managers</li> <li>• 25% max incentive pay</li> <li>• 5–10% normal/expected payout (proportionally similar, but smaller in absolute magnitude)</li> <li>• Incentives are all (100%) performance-based at the OPCO level, with 70–30 objective—subjective, respectively.</li> <li>• Solid, experienced team (although not experienced with recessions)</li> <li>• Idem</li> </ul>

In short, Wessanen’s annual budgeting process is relatively compact and relatively well connected with forecasts and strategic plans. The intent is bottom-up development of targets, except for the final meeting where targets were sometimes “upped” but even then that seemed to be in broad agreement with the OPCO managers to try and keep undue target pressure in check. The process thus appears to be largely consultative and to have quite a few “sequential” connections over time (on a rolling forward basis) through the accompanying first- and second-year forecasts as well as linkages to the strategic plan, at least in a narrative sense. If instructors and/or students are familiar with the Codman & Shurtleff case (from Harvard), they will probably conclude that the Wessanen budgeting process is, on balance, more “interactive” than the Citibank process.

Students usually don't suggest that the budgeting process is abnormally conducive to "gameplaying" (especially slack creation). They conclude this because there are connections with forecasts (from the two preceding years) and budget reviews during the year (from the immediate past year), and there seems to be enough credibility derived from the "push back" that corporate could offer during the final budgeting presentation meetings in November. Incentives based on target achievement also appear to be relatively moderate and not excessively "leveraged". In addition, the relatively "interactive"/interpersonal exchanges during the budget-setting process should eliminate the likelihood of some "last minute surprises" in terms of unrealistic budgets being proposed by the OPCO managers or seemingly excessive target increases being "demanded" by corporate.

Compared with Citibank, there are fewer layers where the budget proposals might "not add up" in the consolidation: i.e., the budgeting process plays out between the corporate level and the OPCO management level. This is not only a matter of organizational layering or complexity; it also increases the chances that corporate management is relatively well informed about what is going on in the OPCOs, which makes for more informed decision making and less propensity to exploit "information asymmetries" (although such opportunities undoubtedly still exist by the very nature of decentralized management).

All told, the budgeting process in Wessanen is likely seen by the students as relatively effective and efficient, thus receiving a favorable evaluation on the whole.

Instructors may also wish to spend some time on evaluating the incentive scheme that has some noteworthy, although quite common, features. All the incentives are based on entity performance (does this potentially curtail cooperation among entities, and is this appropriate?—probably yes and yes, as there are few synergies among the various entities, although there could be some joint decisions that affect working capital). Incentives are mostly determined by formula (70%), although there is a non-trivial portion (30%) left to discretion (could this be indicative of corporate's quite close understanding of the businesses due to these being only just one level down from them?). The formulaic portion is based on the achievement of three "independent" targets, and the total bonus amount is earned strictly cumulatively (which is likely to guarantee some bonus payout even in poor years—is this justified?). The amount of bonus to be earned, though, is relatively modest (in terms of percent of salary). Interestingly, some students will suggest that the actual/average incentive awards of 5–10% of salary suggests that the targets "must be" not challenging enough. Does everyone agree? What levels of payout would indicate stretch targets? Depending on other classes focused on this issue, instructors could spend some time here if they wish on the "optimal" stretch that targets should have.

## Assignment Question 2

The second assignment question focuses on the budget revision. Instructors can force a break from the first question into this question by saying: "So, if all seems relatively well with Wessanen's planning, budgeting, and performance measurement and incentive systems—or at least, nothing seems fundamentally broken about these—then what was the big fuss with the 'major budget revision' in early 2009 all about?"

When the case involves the comparison with Citibank Indonesia, some relevant points are the following:

- The biggest difference that students usually point out is the level of control that was exercised by corporate in the Wessanen case, which they reckon (also from Question 1 above) is one of the fundamental differences in the management control approach or

“philosophy” between both companies. Corporate in Wessanen gave new “guidance” (or rather, issued “edicts”) on the specific line items, while Mr. Gibson (and the corporate levels above him) just gave a new profit target, leaving the rest to the local manager in charge.

Importantly, this is likely to affect managers’ commitment to the (new) targets, which is why it is quite key that we discuss it in more detail below.

- Control on balancing risk and upside is lower in Citibank. They leave it all very much open, which can create unpleasant surprises during execution.

On the issue of commitment, the Teaching Note for Citibank pertinently asks: “Is there a danger that the last-minute, top-down goal-setting process described in the case will cause a loss of commitment to the goal? In the abstract, one would argue yes.” Students will recognize this, but commonly conclude that commitment is probably still marginally higher in Citibank because the required revision is (despite its magnitude) significantly “less invasive” than in Wessanen. In Citibank, the requested revision is left much more open-ended to resolve, leaving much more discretion in the hands of the entity managers compared to Wessanen. There was of course the risk that if nothing (sufficient) came back to Mr. Gibson in Citibank that he would have to go in detail without being prepared. But in Wessanen, entity managers were, in contrast with the normal course of things, given almost no rope and almost no input into what was to be achieved following the imposed revision down to the main line items. One could argue that any input was rather a form of “pseudo” participation.

It is hard to know where this change of heart at corporate came from, although Mr. Schaafsma attributes it to the very dire situation the company found itself in—the “perfect storm” as it were—manifested by a raft of “bad news” (due to the recession, fraud allegations in one of the entities, and delays in strategic changes) compounded (not unusually in such situations actually) by new leadership. However, he also suggested that some “hard” decisions had been delayed or avoided in the past, and for which this crisis now offered an “opportunity” to press ahead. Maybe the students who commented above that target in Wessanen in the preceding years seemed “too easy on average” were correct after all?

Students sometimes also propose alternatives to the budget revision in Wessanen. These can include:

- *Do nothing* and let the original budget stand.

(As I will discuss further under the final question, instructors might want to probe for the implications of this option if it had been followed.)

- *Wait* at least a while longer, e.g., until after the first forecast had been completed.

(The case mentions why this would not have been desirable, but students could disagree. This is essentially a contest between the benefit of waiting (more information) and the cost of having less time to respond within the remaining budget window, in which case the managers would have had possibly even less commitment to anything that could be done in the remaining time, which wouldn’t be very much.)

- Keep OPCO budgets untouched but *build contingencies into the plans at corporate*.

(Again, consider implications, chief among them the situation where the entity managers would be managing against what are likely “obsolete” budgets. This is different from the



first option (“do nothing”) in that corporate would have to manage the organization against two sets of targets: the ones they expect entity managers to meet vs. the ones they believe are very likely different/likely very different/very likely very different.)

- Revise OPCO budgets but *focus on different line-items* (e.g., ignore cost and focus far more on top-line).

More on this below (in the *Wrap-up* section).

### Assignment Question 3

The third assignment question focuses on the “hurricane scenario” in more detail. Some of the facts here are:

- Mr. Schaafsma considered the necessity of the support from top management (which was facilitated by the opportunity of a new CEO who is usually given a license for change).
- Mr. Schaafsma considered giving the OPCOs personal attention during the implementation process (perhaps “strategically” to also try and alleviate the anticipated loss of commitment that he could expect?)
- Mr. Schaafsma developed clear guidance supported by templates and financial modeling (or might this have been “too much” in that it might have reinforced corporate’s heavy-handedness?)
- He made sure the guidance was traceable by basing it on the cost accounts in Hyperion.
- That said, it looked as though they invented the whole process on the fly and that the planning systems were rather inflexible to deal with such revisions.

Some students at this point (or earlier) sometimes note whether the entity managers in Wessanen were up to this task, which might also explain the need for corporate to be more involved or micro-manage. This is a fair inference, indeed, where the caliber of the managers in Wessanen is mostly concentrated in sales (whereas in Citibank one could argue, judging from Mr. Mehli Mistri’s background, that country managers were perhaps more experienced managers in the round).

What is essential for students to understand, and hence to spend some time probing, is the edict to revise Net Sales down, keep EBIT the same, thus implying that budgeted costs had to come down.

It is quite unusual to be “locking in” the entity managers in this way, be it because they are less and/or more narrowly experienced (and as sales-oriented people might otherwise focus on the top-line instead of on the bottom-line), or because planning and budgeting in Wessanen is generally more “tight” and, on balance, probably more top-down than in, say, Citibank. Again, in Citibank, the lower-level managers had much discretion, and were trusted, to “find” the shortfall where they deemed best or most appropriate given their understanding of the business. Not so in Wessanen, where essentially the shortfall must be found through cost cutting, and even then, with a steer from corporate about which costs to target to boot. This was very much a “this-way-or-the-highway” approach to this significant budget revision.

The fact that Wessanen always has had three targets—the three KPIs of Net Sales, EBIT, and Working Capital—meant that the revision could be surgically implemented by focusing on

costs. The entity managers may have been “relieved” to have a less challenging Net Sales target given the deteriorating market situation, but this was not an across-the-board target reduction where also EBIT, or the bottom-line, was proportionally reduced. Quite to the contrary, by fixing the EBIT target, there was no choice but to bring costs down.

This is very different from most “divisional budgets” in decentralized firms where there would be one target—the so-called “bottom-line”—usually expressed as one form of profit or another, and thus the result of revenues minus costs. When such a bottom-line target is being increased, the managers have the discretion to meet the new target either through increasing revenues and/or reducing costs.

This explains the rhetorical question at the end of the Wessanen case: “What [corporate] obviously could not know is whether the [OPCO] budget[s] would have been met even if [they] had not been reset ... *but would that have been a good thing?*”

“Not revising the budget” in this case would have meant leaving the top-line (Net Sales) target (as well as the other two targets) untouched, which would have likely rendered the sales target near-unachievable due to the serious deterioration in demand. But the entity managers might have wanted to achieve it anyway despite the adverse market conditions. The question then is whether they might have done so by taking actions to meet their target even at the expense of Wessanen’s long-term success, such as by way of the proverbial “shipping bricks and other tricks” or “stuffing the channel” variety.

Corporate apparently did not want to leave this to chance. By allowing an “easier” sales target (a 10% reduction), corporate essentially took the wind out the sails of the entity managers who may otherwise have been tempted to engage in such potentially harmful, myopic behaviors. What they then would have got is presumably “achieved” sales targets; no cost rationalizations; and likely the same EBIT. This might have left Wessanen worse off on up to two counts: the “realized” sales being possibly “not real” or, if not that, not long-term sustainable, and also no cost economies. In the alternative approach they pursued, Wessanen reduced the pressure on sales, got some good cost economies, while maintaining EBIT. Of course, this did not eliminate the risk that costs might have been cut too feverishly with potential longer-term negative consequences as well, but as the case suggests, this was rather easier to orchestrate (if willing to micro-manage).

But there is a further interesting twist to this plot. Because the entity managers were mostly sales-oriented, they felt less frustrated by corporate meddling in costs, whereas they would have likely felt more annoyed had corporate interfered in “their” sales, for which they were now actually given a break by way of a target reduction to recognize the adverse market conditions they faced.

This means that the normal “bottom-line” focus in most companies that allows the managers to consider either to try and increase revenues, reduce costs, or both, was in this case limited to just reducing costs, on which corporate had the upper hand to guide, advise, and if felt necessary, cajole or enforce. Moreover, this approach was also inherently more “strategy consistent” in terms of the needed rationalization of growth and the required repositioning in some markets.

#### **Assignment Question 4**

The final assignment question focuses on the broader question of budget revisions during the year, and whether or not they should be a feature of any budgeting process or rather

be (kept) an “exceptional” occurrence. Some background reading to think this through can be found in:

W. A. Van der Stede and T. Palermo, “Scenario Budgeting: Integrating Risk and Performance,” *Finance & Management*, no. 184 (January 2011), pp. 10–13.

Even when not assigning this article, a discussion around some points in the article can be triggered, particularly, for starters, by way of suggesting that:

[...] performance inevitably goes through cycles, yet most companies fixate their budgeting on a single fixed target. When business is good and managers are more likely to reach their targets, they may be missing opportunities exactly because targets are being too easily met. In contrast, when business is tough and targets set earlier may have become impossible to achieve, managers may engage in foolhardy attempts to meet their targets nonetheless. Neither leaving money on the table when things turn out better than expected, nor foolhardy behaviours when business prospects are worse than expected, are wanted.

Based on this premise, could one argue that target setting should be flexible enough to incorporate uncertainty; that targets should move as business conditions turn planning assumptions upside down?

But then, how can this flexibility of target setting be achieved without triggering unintended consequences, such as diluting the motivational effects of targets or attracting mistrust for “reneging” by re-setting targets? This is the key tension. (The article discusses this tension, and possible ways to try and mitigate it, in more depth.)

Clearly, the pros and cons of changing the budget targets during the evaluation period need to be carefully weighted, where essentially the tussle is between:

The risk of undermining the effectiveness of the results control system (including sticking with the prospect of incentives that are unlikely to pay out and, thus, are losing their motivational power).

vs.

The risk of undermining the credibility of the results control system by revising the rules during the performance period.

Put differently, not revising the targets may discourage managers from exerting effort because their efforts have little or no effect on results. Revising the targets, however, may encourage managers to “get on” with the task (and avoid making excuses for why they underperform) and is likely to motivate them to come up with productive responses to changes in the environment.

Some students might suggest ways (other than “scenario budgeting” as discussed in the article) to “fix” the results control system by trying to alleviate the need for target revisions during the year. As is always the case, however, neither of these “fixes” come without their own downsides. Here are a few possible fixes (and their downsides) that could be considered:

1. Firms could use shorter budget time periods or have some form of “rolling budgets” to track the (volatile) economic reality more closely, or more timely, but that will tend to make the

results-based incentives to be settled on even shorter time periods than annually which is typically seen as possibly too “short term” already (although it might cause incentives to be paid more timely as well, which employees value).

2. Another alternative might be to resort to RPE (relative performance evaluations) to try and reduce the “noise” due to uncontrollable factors particularly in uncertain environments. But even though Wessanen is in the food industry as a corporation, its various lines of business are buffeted by quite different external forces, indeed some of which are counter-cyclical (and which may actually be strategically sensible but which undermines the potency of RPE).

On the occasions where I did assign the “scenario budgeting” reading with the Wessanen case, some student group responses to this question were inevitably trying to apply the “solution” of scenario budgets quite “analytically,” yielding the following points:

- Start with analyzing the most important strategic drivers for the KPIs involved: accounts, brands, transportation costs, and economic/market growth. Keep this number low to manage complexity.
- Create a budget.
- See if you can quantify the strategic drivers and what the effect is on the various budget line items. If relevant alternative scenarios arise from this analysis, decide on maximum two alternative scenarios and document the driver values that form the base of the alternative scenarios.
- During performance reviews, always start the review with the actual values of the strategic drivers. Cross check the scenarios.
- Given the lean-and-mean process Wessanen has in place, this could work. Only about six weeks to prepare the budget is short, so this could be lengthened somewhat to include scenario analysis.

But, here too, instructors should be conscious to not get bogged down in the technical detail, but instead try and force the students to think about how this might (more so than any of the other alternatives?) navigate the key tension between short-term and long-term considerations—that is, between maintaining management motivation now and the ongoing credibility of the results control system?

### **Wrap-up**

The Wessanen case combines several results control system themes, such as planning and budgeting, target setting and associated incentives generally, but with a special focus on the issue of whether or not to revise targets during the year. This is inevitably all anchored in the pivotal understanding of planning and budgeting under uncertainty, exacerbated here by a turnaround situation. This makes the planning and budgeting process, which is supposed to bring rigor to assessing future performance, “messy.” In addition, there are some concerns related to the ability of the entity managers to make “precise” performance projections due to a lack of (general) management experience and, possibly, the habit of a “last-year-plus” budgeting culture in the company. If the past is, however, no longer a good predictor of the future (due to the recession and turnaround situation), then obviously this approach loses its effectiveness

(even more). This, however, does not eradicate the need for planning, and instructors can provoke students with the following thought: Do unpredictable futures render *all* planning and budgeting essentially useless, or, is it then especially that firms stand to benefit the most from *effective* planning and budgeting processes, and if so, what do such effective planning and budgeting process look like?

## **Pedagogy**

Instructors must make a decision as to how structured to make the case discussion. I tend to be fairly structured in guiding students through the four discussion questions in the order listed, although inevitably some students will already make comments earlier that are relevant for the final question (i.e., whether or not budget revisions should be done, and if so, how). The “on-the-spot” judgment instructors have to make is how expansive they want such front-running discussions to be at the time they arise. I usually let these discussions happen, but make sure to slot the key points elicited from those discussions under the right rubric on my whiteboard, which looks as follows (in four columns): PLANNING & BUDGETING PROCESS; SPECIFIC BUDGET REVISION DETAILS; “HURICANE SCENARIO” IMPLEMENTATION; TO REVISE OR NOT TO REVISE? As one can see, these of course correspond with the four questions. I attempt to go through these left to right, but when a student makes a good point that better suits one of the other rubrics, I either allow that discussion to take place or I park it under the other rubric to come back to when we get to that point (often by calling on the same student to pick it up again and get the discussion going).

While structure is important, allowing sufficient flexibility about the number and order of issues raised will give the students a sense of ownership and lead to stronger engagement in the case discussion. This is a case that can easily lead to quite extensive discussions on variously related results control system themes, so time management needs to be kept in check somehow.



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## **The Stimson Company**

### **Teaching Note**

#### ***Purpose of Case***

The Stimson Company case provides an opportunity to discuss budgeting and control issues in a project environment. Most of the case issues deal with project budgeting—how budgets are prepared and used. But several performance measurement and people issues are also relevant to the case issues.

#### ***Suggested Assignment Questions***

1. What would an income statement for Project 14321 for the period from November 12, 2014 to July 31, 2015 show using: (a) percentage-of-completion accounting; (b) completed-contract accounting?
2. If you were an investor with an equity share in Project 14321 but not involved in the management of the project, would either of these income statements help you judge how your investment was doing? Would you need other information to help you judge whether or not the project was “in control”? If so, what?
3. What caused the problem on Project 14321?
4. What should Henry Stimson do?
  - a) What can he do immediately to minimize some of these problems?
  - b) What should he do over the next several years to ensure the development of an improved project control system? How would this new system operate? (Be as specific as you can).

The purpose of the first question is to set up a review of the basic methods of project accounting. If that is not desired, Question 1 can be eliminated.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using The Stimson Company case (A216-06).*

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## **Discussion of Questions**

### **A. Project Accounting and Control by Outsiders**

Question 1 deals with project accounting. The answers are as follows:

#### **a. Percentage-of-completion (43% complete)**

Sales  $(0.43 \times 3,426,248)$  (Exhibit 4) = \$1,473,287

Expenses  $[0.43 \times (2,125,680 + 1,102,898)]$  = \$1,388,289

Net profit to date = \$84,998

A corollary to this question is as follows: Assume the costs to date are mostly purchased materials so that on a value added basis (value added = total costs – material purchases), the project was only 20% complete. Does this change the percentage-of-completion accounting number?

The answer is probably “yes.” According to project-accounting rules, during the early stages of a contract, all or a portion of items such as material and subcontract costs may be excluded if the result is deemed to produce a more meaningful allocation of periodic income. This is an accounting judgment that must be made.

#### **b. Completed-contract accounting**

Both sales and expenses for the period are zero.

Question 2 is important because outsiders must rely on such accounting figures to control the behavior of managers within the firm and to value the firm. The percentage-of-completion method of accounting provides better information than does completed contract, even though it relies on management estimates of the ultimate costs and verification by auditors who may not be qualified to second-guess the estimates.

### **B. Management Control in a Project Environment**

The last two assignment questions deal with management control in a project environment. The Stimson Company lives on its ability to manage large projects effectively. The project described in the case is 20% of an entire year's revenues of \$15 million.

When using this case, I start this part of the discussion with the following question: What would you, as Henry Stimson, need to know at any point in time to feel confident that this project is “under control”? Students will, hopefully, observe that if Henry feels confident that the people who are working on the job are competent, that they are being careful, and that they are working within the approved plan, he can probably conclude that things are in control. The important point is that as long as Henry does not run everything himself (and he can't), he has to trust his people; they are a key element in the control system. The budgeting and measurement systems are secondary.

#### **1. Budgets**

One important question that can be asked about the Stimson situation is: Why prepare a budget at all? The Stimson Company uses budgeting for multiple purposes, and it is the conflicts between these purposes that is causing the main problem in the company—the

organizational tension. The first purpose for project budgeting is for pricing. The sales engineers must prepare an estimate of costs of risks in order to be able to price the job. This is necessarily a quick and rough job. The sales engineers prepare approximately ten proposals for every job the company gets. They estimate from a concept, usually without complete specification sheets or drawings, but they have some rules of thumb (e.g., dollars per cubic foot of capacity) that are remarkably accurate.

After a proposal is accepted, the sales engineer inputs a budget for variable costs only. The argument for excluding fixed costs is that even if they are not truly fixed, they are not controllable by the project leader. This budget is used for company planning and coordination purposes. It is a way for the sales engineer to communicate all he knows about the project to the project leader at the time of turnover of responsibilities. It is an input to the fabrication areas for resource scheduling purposes. And it is used by the controller's staff to plan financial requirements. Finally, the budget is used for motivation and learning purposes. The project leader is motivated to meet the budget, and after the final results are in, the project leader and the sales engineer can learn how accurate the budget was and how actual costs are running.

The distinction between budget revisions and budget adjustments is important. The revisions are caused by customer scope changes. The question is: Who should make decisions to absorb some of the losses, if they are necessary? The case provides descriptions of several budget revision (scope change) examples, so it is possible to talk in specifics.

The adjustments are caused by the project leader realizing that the initial budget (or actual performance) is not very good; performance is at least not meeting the budget. The budget adjustments are a weak link in the system. Again, I like to pick one or two examples to get the students to think about whether the variances are caused by a bad budget or poor performance.

Actually, variances for which the company is responsible may be caused by any of the following: (1) conceptualization problems or calculation errors at budget-input time; (2) actual design differed from plan (either too elaborate, or cost savings discovered); (3) production efficiencies (design, fabrication, installation); or (4) spending variances (labor, materials). If these factors could be isolated, a very useful variance analysis format could be set up.

If the opportunity presents itself, a number of the specific budgeting issues can be discussed. They are as follows:

- a) In preparing proposals, the company takes a mark-up on full cost. Why bother with full cost? Why not take a bigger mark-up on variable cost? The answer is that the company has eight fixed overhead rates because they believe that in the long-run, the fixed costs are not fixed and that they vary with different variable costs. Therefore, full-cost-plus may give a better long-run estimate. After defending the company on this point, I sometimes ask if they should charge a mark-up on purchased materials.
- b) Is it logical to add a risk premium contingency? Yes, this is very common in a project environment to protect the company against unforeseen problems.
- c) Is it logical to adjust the price for market factors? Yes, clearly it is desirable to have flexible pricing. The Stimson Company has demonstrated strength in manufacturing dust systems for the paper industry, and they should be able to make excess profits based on this strength, although certainly prices must be responsive to the large business cycles in the industry.



## **2. Monitoring**

The monitoring of actual costs and asking for explanations of variances is a curious feature of the control system. It is almost as if management does not trust the project leader to read the cost reports and react to them. It is also unique that the detailed cost reports are circulated and then kept only by accounting.

## **3. Organizational Tension**

The tension in the company is caused by a lack of understanding of the roles in the company, particularly the sales engineer role. Some students will suggest that the sales engineer and project leader roles be combined; one person would follow a project from conception to the end. The company has considered and rejected this idea. The two roles require different skills. The skill unique to the sales engineer—ability to estimate from a concept—is very rare, and it would be a waste of resources to make a part-project leader out of a good sales engineer.

## **4. My Solution**

My solution to this problem is the following:

- a) When the sales engineer sets the first budget, fix the cost target at that level. The project leader gets that amount of money, including the contingency amount, then he or she can allocate it any way he or she wants. The project leader fixes the targets for the fabrication and installation areas.
- b) Any total dollar budget increases have to be approved by the sales engineer. Since these come out of the company's profit margin, there should be very few. If this becomes a problem, Henry Stimson might have to review them. Involving the sales engineer at this point will be useful both as a check on the project leader and as a learning mechanism for the sales engineer.
- c) The company needs better communication between the sales engineer and the project leader at the time of turnover of responsibility.
- d) The company needs better standards for specific recurring activities.

It is interesting to note that at the end of the case, it was noted that the profit margin on this job was slipping, from an original plan of 11% to less than 6%, and the project leader was pessimistic about being able to hold even to the existing budget. When the project was completed, however, the actual results were almost exactly on the original target (11%). Henry Stimson noted that this was not unusual, as the estimates of the sales engineers had proven to be remarkably accurate (in total) over the years.

## **Pedagogy**

The issues identified above provide more than enough to talk about for one class. If controls is the focus, the key is for the students to understand that in this highly technical and uncertain environment, Henry Stimson has to rely, to a considerable extent, on his people. The budgets and measurements are crude; even 99% completion indicated does not rule out the possibility that major last-minute problems will occur at the final installation.

If budgets are the focus, the case provides an excellent opportunity to contrast the multiple roles that budgets play. These roles often conflict. That is, budgets are used for planning purposes and should provide documentation of what is to be accomplished and a “best guess” as to what it will cost. Budgets are also used for motivational purposes and should be moderately challenging. Finally, as standards for evaluating poor performance, it might be necessary to adjust the budget standards for the occurrence of uncontrollable events.

The danger in the class is that too much time will be spent on the case analysis and not enough on the synthesis. It is useful to allow 20–30 minutes for recommendations and summary.



University of Southern California

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Rev. 9/19/16

## Multiple Versions of the Plan

### Teaching Note

#### *Purpose of Case*

This case was written to allow students to discuss an ethical issue in a strategic planning context. The key character, Anthony, a young financial analyst who has been asked to prepare a presentation about a newly-developed Corporate Restructuring Program to the company's board of directors, has to make a decision that has ethical dimensions to it.

Accountants' or financial analysts' professional standards do not provide specific guidance as to what to do in such a situation, but professional codes of ethics can be considered in addressing this case. Just as an example, the code of conduct for management accountants, as prescribed by the Institute of Management Accountants (IMA), is shown in the Appendix to this note. Some of the "virtues" in this code can be related to the case discussion. Would Anthony's conclusion in this case be different if he was, or was not, a member of the IMA?

This is a real case. Only the names have been changed.

#### *Suggested Assignment Question*

What should Anthony do? Why?

#### *Discussion and Pedagogy*

If students are experienced at analyzing ethical issues, this case can be discussed in an unstructured way. Experienced decision makers should naturally identify stakeholders, consider ethical principles, and look for alternatives. If the students are inexperienced, I suggest imposing a structure on them, such as the "Seven-Step Decision Model."

---

*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Multiple Versions of the Plan case [A213-06].*

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1. Clarify facts

- Anthony is a young financial analyst at corporate.
- Anthony has been given an assignment to present the details of a corporate restructuring program to the company's board of directors. Anthony is excited by this opportunity to be given this responsibility, which will give him exposure to a high-level decision-making group.
- The program involves 83 projects that reduce expenses by \$100 million.
- The presentation was finalized on Wednesday. It was practiced on Thursday. The final presentation is scheduled for Sunday.
- Anthony receives a last-minute call from the company's head of financial planning. She has looked at the business units' budget submissions. It appears that the program will now not meet its goals unless an extra \$15 million (2% of revenue) in cuts are found.
- The new numbers are soft. There was no time to review the new budget submissions.
- Time is short. There is no time for discussion and/or recasting of the presentation. In fact, Anthony cannot even mention the issue to the CEO before the meeting. (The Resolution of Ethical Conflicts section of the IMA Code provides no useful guidance.)

2. Define the ethical issue

Stakeholders:

- Anthony
- Mr. Thomson (Chairman/CEO)
- The employees (restructuring = layoffs)
- The board
- Anderson Industries and its shareholders

Depending on what Anthony does, one or more of these stakeholders can be harmed or treated unfairly.

3. Identify major principles, rules, and values

The ethical issue can be seen through multiple lenses:

- The **cost** of embarrassment to the boss (careless preparation of numbers) vs. the **benefit** of providing good information to the board
- An **obligation** to present good information to the board
- **Fair** presentation
- **Integrity** and other virtues

Some of these values, particularly integrity, can be seen directly in the IMA code of conduct.

4. Specify the alternatives

Anthony can:

- proceed with the presentation as prepared;
- incorporate the new numbers into the presentation;
- try to finesse the problem, such as by not showing numbers; or
- admit there is some uncertainty.

5. Compare values and alternatives. See if there is a clear decision.

Some students will conclude that it would be dishonest (lack of integrity) for Anthony to present numbers that he knows to be incorrect. But there is uncertainty as to whether the new numbers are correct. Because of time constraints, normal discussion and deliberation were not feasible. Thus, the issue is more uncertain. Can Anthony find a way to inform the Board appropriately without raising the ire of the CEO by undermining the substantial work that had already been done as well as the CEO's credibility?

6. Assess the consequences

Clearly the path of least resistance is to give the presentation as planned. But what if the new numbers are correct? The consequences include career and personal concerns of Anthony, the CEO and perhaps some others, the health of the company, and the credibility of the board. The stakes are high.

7. Make a decision

For pedagogical reasons, it would seem to be best to let the students propose various answers and defend them. It is desirable if they approach the issue from different angles and reach different conclusions. This will enhance learning.

To encourage class discussion, it can be useful to change some of the facts to see if the new facts would change the students' conclusions. For example, assume that Sharon called just before the meeting and asserted that the spreadsheet was wrong. Do you trust her?

In the real case, Anthony gave the original presentation but added a "next steps" slide that conveyed some uncertainty and, almost as an afterthought, the fact that new budget numbers, should they become available, would be factored in. No alarm bells went off in the board meeting. In the end, the company met its cost reduction goals.

It should be noted, though, that this was not necessarily the right (most ethical) decision. In some senses, Anthony got lucky. One or more board members might well have probed more deeply, and Anthony would have had to surface the issue more clearly. Or, if the new budget numbers were correctly more pessimistic, the company quite possibly would not have met its cost reduction goals, and the board might have asked for an explanation of the failure in a subsequent board meeting.

Some complicating factors in this situation

- Anthony was stressed. This was a great opportunity for high-level exposure for him. But because of the stress, he was not necessarily thinking clearly.
- The slide deck was preloaded in the board meeting computer. It was not easy to change.

- This was Mr. Thomson's first board meeting as CEO. He couldn't afford to look bad with the board. He wanted to avoid surprises.
- Maybe Anthony should have bought time to have a side conversation with Mr. Thomson. Maybe, for example, he should have spilled some coffee and had that conversation as the coffee was being cleaned up.

The main learning objective

The case intentionally presents ambiguity. The new numbers are not necessarily better. Similar uncertainty is present in many real situations that require ethical judgments.

The final conclusion, the judgment about what Anthony should do, is not the most important point for the teaching of the case. The goal is to give students practice in good ethical decision-making. This cannot be done without clarifying facts, identifying stakeholders, invoking some ethical reasoning models, and considering alternatives. Students with different interpretations of the facts and/or different ethical perspectives can reach different conclusions as to what Anthony should do, and that is a totally acceptable outcome for the class.

# Appendix

## The Institute of Management Accountants (IMA)

### Statement of Ethical Professional Practice (Effective July 1, 2017)

#### Principles

IMA's overarching ethical principles include: Honesty, Fairness, Objectivity, and Responsibility. Members shall act in accordance with these principles and shall encourage others within their organizations to adhere to them.

#### Standards

IMA members have a responsibility to comply with and uphold the standards of Competence, Confidentiality, Integrity, and Credibility. Failure to comply may result in disciplinary action.

#### I. COMPETENCE

1. Maintain an appropriate level of professional leadership and expertise by enhancing knowledge and skills.
2. Perform professional duties in accordance with relevant laws, regulations, and technical standards.
3. Provide decision support information and recommendations that are accurate, clear, concise, and timely. Recognize and help manage risk.

#### II. CONFIDENTIALITY

1. Keep information confidential except when disclosure is authorized or legally required.
2. Inform all relevant parties regarding appropriate use of confidential information. Monitor to ensure compliance.
3. Refrain from using confidential information for unethical or illegal advantage.

#### III. INTEGRITY

1. Mitigate actual conflicts of interest. Regularly communicate with business associates to avoid apparent conflicts of interest. Advise all parties of any potential conflicts of interest.
2. Refrain from engaging in any conduct that would prejudice carrying out duties ethically.
3. Abstain from engaging in or supporting any activity that might discredit the profession.
4. Contribute to a positive ethical culture and place integrity of the profession above personal interests.

#### IV. CREDIBILITY

1. Communicate information fairly and objectively.
2. Provide all relevant information that could reasonably be expected to influence an intended user's understanding of the reports, analyses, or recommendations.
3. Report any delays or deficiencies in information, timeliness, processing, or internal controls in conformance with organization policy and/or applicable law.
4. Communicate professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity.

#### **Resolving Ethical Issues**

In applying the Standards of Ethical Professional Practice, the member may encounter unethical issues or behavior. In these situations, the member should not ignore them, but rather should actively seek resolution of the issue. In determining which steps to follow, the member should consider all risks involved and whether protections exist against retaliation.

When faced with unethical issues, the member should follow the established policies of his or her organization, including use of an anonymous reporting system if available.

If the organization does not have established policies, the member should consider the following courses of action:

- The resolution process could include a discussion with the member's immediate supervisor. If the supervisor appears to be involved, the issue could be presented to the next level of management.
- IMA offers an anonymous helpline that the member may call to request how key elements of the IMA Statement of Ethical Professional Practice could be applied to the ethical issue.
- The member should consider consulting his or her own attorney to learn of any legal obligations, rights, and risks concerning the issue.

If resolution efforts are not successful, the member may wish to consider disassociating from the organization.

Source: <https://www.imanet.org/-/media/b6fbbeb74d964e6c9fe654c48456e61f.ashx>





**University of Southern California**

**Marshall School of Business**

Leventhal School of Accounting

## **Vitesse Semiconductor Corporation**

### **Teaching Note**

This case was written to illustrate an interesting example of the programming element of a planning and budgeting system. In this case, the focus is not on capital projects (i.e., capital budgeting), it is on R&D projects. The setting is a semiconductor company. The company setting, the people, the process, and the issues are real. The project selection options are representative of the types of actual options the company's managers had to consider.

Most companies have a long-term business model that defines "ideal" rates of growth and profitability and specifies how the various elements of expense relate to each other in equilibrium. Then they have to decide how to allocate resources to achieve this ideal. This case is designed to provide a feel for the short-term vs. long-term trade-offs inherent in most resource allocation decisions. Such decisions require considerations of many factors beyond NPV (or IRR) and risk.

This is a difficult case. Because of that, I have only assigned it to students working in groups. To the extent possible, I make the group size equal to four. The groups are able to do an effective job of analyzing the case. Some students working as individuals would undoubtedly be lost in this assignment.

The following three pages provide the instructions for students, verbatim:

### **Group Assignment**

#### ***Vitesse Semiconductor Corporation***

Most companies have a long-term business model that defines "ideal" rates of growth and profitability and specifies how the various elements of expense relate to each other in equilibrium. Then they have to decide how to allocate resources to achieve this ideal. This case is designed to provide a feel for the short-term vs. long-term trade-offs inherent in most resource allocation decisions.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using the Vitesse Semiconductor Corporation case.*

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## **Instructions for Students**

Work in your group. Study the case to learn about Vitesse and its opportunities and challenges. Shown below in the assignment are descriptions of 13 R&D project options. Assume the role of Vitesse senior management and decide what projects to invest in for Years 1, 2, and 3. Using the provided Excel model (**Vitesse IRR Calculations Template**), choose the projects that you believe are most likely to drive Vitesse's long-term success. The model will calculate the effects of investment decisions on long-term revenue and profit.

To make your choices, enter the revenue and investment dollars of the projects you choose into the yellow-highlighted fields. Make sure to enter Year 1 projects in the Year 1 start rows, Year 2 projects in the Year 2 start rows, and so on. If you choose a project with investments in multiple years, such as Bell, enter the revenues and investment in all of the affected years. The P&L model will automatically update based on your decisions. Just as an example, the revenue and investment for project Edison has been entered for Year 1, but you can remove these entries if you wish.

Your investment target is between \$24 and \$30 million annually. Because of capital constraints, you may not invest more than \$30 million in any given year. You can choose to invest less than \$24 million but if your investment drops below \$22 million, it will result in lay-offs or other negative consequences.

You cannot choose to invest in future derivative projects if you did not make the investment in the original project. For example, you cannot invest in Project Bell in Years 2 and/or 3 if you didn't invest in Bell Year 1. For reasons of simplicity, if you choose a project in Year 1 (or Year 2) you must continue to invest in that project until its completion.

## **Deliverables from Students**

**Before class**, send me an e-mail message from your group telling me (1) which of the 13 projects your group decided to invest in for Years 1, 2, and 3; (2) what revenues and operating profits the company would expect to report in those three years given your choices; and (3) what your thinking process was in making your allocation choices (a few sentences maximum).

**At the end of class**, hand in a report that answers these questions:

1. Which of the 13 projects did you decide to invest in? Why?
2. Which projects did you choose NOT to fund in Year 1? Does the elimination of any of those projects have long-term consequences that are not reflected in the model?
3. The marketing department is currently evaluated on project performance vs. forecast. What if marketing personnel were evaluated on annual revenue goals? Which projects would they select in Year 1 if their objective was to maximize Year 2 revenues? Compare the outcome to the outcome of your original project selections. Would increasing short-term revenues be a wise choice?
4. Vitesse's management has told Wall Street analysts that revenue from new products is expected to reach \$60 million by 2014 (Year 5 in the Excel model). Can that goal be achieved? By what set of choices?

5. How should Vitesse evaluate R&D project investment opportunities? Is project IRR a useful criterion?
6. Historically, Vitesse products have not had a lot of software content, and software engineering has been allocated across all projects. However, Vitesse is now investing \$3 million to design software IP that is expected to be used by three different projects. How should Vitesse treat that investment in the portfolio analysis?

**Identified Vitesse R&D Project Options** (see financial projections immediately following this section):

1. **Edison**—This project was initiated in prior years and has already been designed into customer's products. If this project is not selected, the company will lose credibility with important customers.
2. **Galilei**—Like Edison, this is a continuing project that needs additional funding.
3. **Newton**—This project is well-defined and carries little risk. The marketing department is confident of the revenue forecast. However, its payoffs are very short-term, and at this point there are no expectations of derivative projects.
4. **Bell**—This project, if successful, could lead to a new line of extremely profitable products. But, this project is risky. The chances of success and the size of the eventual market, if the product is made to work, are both difficult to estimate.
5. **Doppler**—This project is being developed for large, long-time customers. The revenue from this project is relatively predictable.
6. **Drake**—The CEO of Vitesse has been championing this project from its inception. He believes that it represents a core technological element in the company's future. If successful, this project will likely spawn at multiple derivatives.
7. **Hubble**—This project has some promise. It requires the unique expertise of a 10-person R&D group located in Atlanta. If you don't choose this project, the R&D group will be underutilized and the decision could result in lay-offs.
8. **Curie**—This project will not generate revenue immediately, but is very likely to generate significant revenues with high returns in the future. In fact, some managers think that the forecast is understated.
9. **Ptolemy**—The revenue from this project is uncertain. Long-term revenue forecasts vary by as much as 100%.
10. **Benz**—This project is an upgrade requested by a medium-sized customer. It is specific to the customer. It does not seem to lead to any new long-term revenue or return opportunities, but almost assuredly it will generate a nice bump in revenue in Year 2.
11. **Carver**—This is a derivative from the Edison project. If Edison is not continued in Year 1 to a successful conclusion, then this project is not feasible.

12. **Hawking**—This is a derivative from the Galilei project. If Galilei is not continued in Year 1 to a successful conclusion, then this project is not feasible.
13. **Da Vinci**—This project is the first entry into a new market. The market is already saturated and margins are low. It is unlikely that this project and its derivatives will ever generate a 35% IRR. However, already 4–5 derivatives from it can be foreseen.

**Three-Year Financial Projections for the Identified Vitesse Project Options**

Year 1 Project Options	Edison	Galilei	Newton	Bell	Doppler	Drake	Hubble	Curie	Ptolemy	Benz	Carver	Hawking	Da Vinci
Revenue (\$ millions)	20.7	15.0	21.4	2.8	6.6	6.1	17.9	5.8	11.4	1.0			
Investment (\$ millions)	-4.5	-6.2	-5.6	-3.1	-3.0	-5.5	-6.1	-4.1	-6.0	-4.9			
IRR	47%	23%	39%	-2%	20%	2%	29%	8%	15%	-25%			
Year 2 Project Options													
Revenue (\$ millions)			22.3	45.9	15.9	14.3	19.0	23.7	29.9	20.5	11.1	20.0	
Investment (\$ millions)			-5.0	-4.7	-4.8	-3.8	-6.9	-4.8	-5.4	-2.3	-4.7	-6.1	
IRR			45%	89%	33%	38%	27%	50%	55%	83%	22%	33%	
Year 3 Project Options													
Revenue (\$ millions)				75.2	41.0	31.0	18.4	98.4	45.8	32.1	22.0	8.2	
Investment (\$ millions)				-2.2	-4.9	-4.5	-4.7	-6.2	-2.2	-3.2	-3.8	-4.1	
IRR				230%	79%	67%	40%	130%	159%	91%	58%	17%	
Multi-Year Project IRR	47%	23%	42%	79%	45%	33%	30%	63%	50%	25%	48%	41%	17%

## **Discussion**

It is impossible to determine a single, optimum solution to this exercise. Maybe as real option pricing theory advances, we could get closer to determining an optimum, but in the meantime managers have to make choices. Even ignoring the financial reporting implications of the choices, which are important, managers must consider trade-offs among risk, return, and time horizon in each of the choices that must be made. Some of the information can be quantified; some is qualitative but still potentially important. Some of the projects are interdependent. Investing in one project which, by itself, might be not that attractive, sometimes opens opportunities for investing in new, derivative projects that are very promising. Understanding the issues and their complexities is the take-away for the students.

As can be seen in the assignment, I ask the student groups to send me a message showing (1) their project choices; (2) the three-year revenue and profit outcomes of those choices; and (3) a brief explanation of the rationale for their choices. I summarize (1) and (2) in a table that I display near the beginning of the class. This table inevitably shows that the groups did not agree on their choices. Then we spend some time discussing why certain groups made the choices they did.

The rationales the students use for making their decisions are varied. Some groups place more emphasis on short-term profitability, while others are more long-term growth-oriented. Some place a high value on predictability, while others are more tolerant of risk. Some focus primarily on the quantitative factors; others take more qualitative factors, such as reputation, customer retention, CEO appeasement, and the like, into consideration. I think it is important for each group to be able to explain their rationale, assuming it is different from what has already been voiced in class. Just seeing how different groups approach the problem is instructive for the students. In their reports, I ask the students to describe their rationales for investing or not investing in each of the projects (Questions 1 and 2).

**Question 3.** The marketing department is currently evaluated on project performance vs. forecast. What if marketing personnel were evaluated on annual revenue goals? Which projects would they select in Year 1 if their objective was to maximize Year 2 revenues? Compare the outcome to the outcome of your original project selections. Would increasing short-term revenues be a wise choice?

If the marketing department personnel were evaluated in terms of annual revenue goals, they would select projects that maximize revenue in Year 2, and perhaps reduce revenues in Year 1 depending on the baseline for measuring growth. To maximize revenue in Year 2, they would probably choose Newton, Bell, Curie, Ptolemy, Doppler, and Drake in Years 1 and 2 (to fall within budgetary constraints). Focusing on short-term revenues would have costs in terms of future growth, loss of credibility with important customers, loss of key employees and, possibly R&D underfunding in Year 3. These choices have implications, and the incentive system can have significant effects on the choices.

**Question 4.** Vitesse's management has told Wall Street analysts that revenue from new products is expected to reach \$60 million by 2014 (Year 5 in the Excel model). Can that goal be achieved? By what set of choices?

This goal can be achieved, and actually exceeded, depending on which projects are considered to be "new." One plausible interpretation is that projects Newton, Bell, Doppler,

Drake, Hubble, Curie, Ptolemy, and DaVinci are all new. The better students will also observe, however, that meeting this goal would be ill-advised.

**Question 5.** How should Vitesse evaluate R&D project investment opportunities? Is project IRR a useful criterion?

It seems obvious to business students that IRR should be an important, if not the dominant, criterion for making investment decisions such as those presented in this case. Vitesse managers are also convinced about the benefits of considering IRR, although they are struggling to make such a system work. Interestingly, though, I was on the board of a semiconductor company that also had this discussion about the use of IRR, and they concluded that they could not make it work. They did not think the numbers could be made useful because they were too soft and subject to bias. The IRR computations are made much more complex when the projects are interdependent; i.e., when the successful completion of one project opens opportunities for new investments at a time in the future, as is common in this industry.

**Question 6.** Historically, Vitesse products have not had a lot of software content, and software engineering has been allocated across all projects. However, Vitesse is now investing \$3 million to design software IP that is expected to be used by three different projects. How should Vitesse treat that investment in the portfolio analysis?

This was a real problem that Vitesse was facing. It is a cost assignment or allocation problem. Certainly, projects that would not benefit from the software should not bear a share of the costs.

The cost of the software and related engineering should be charged to the three projects on some rational basis. Perhaps the software engineers' time can be traced to specific projects, and the indirect costs (e.g., software purchases) can be allocated on the proportion of the direct costs. If all the costs must be allocated, perhaps the most obvious method is on a proportion of sales projections, which might be proportional to the amount of effort that went into the software development. Allocating on the basis of project profits would be an assignment based on an "ability to pay."

Managers should recognize that none of these assignments except the tracing of direct costs, is obviously correct. They should do sensitivity analyses to determine whether the allocation method would affect decisions they might make based on project profitability.

Another possibility is to keep the cost of the software in corporate overhead and then cost it out to each project as the software is utilized. This would be like a licensing model. These three projects should not necessarily bear the entire cost if the software investment adds capabilities to the corporation that will be utilized by other projects that have not yet even been identified.

## ***Pedagogy***

I have found that the students come to class well prepared for the discussion. This is a graded group assignment, so they take the project seriously. The discussion flows easily because they can easily see that other groups made quite a different set of choices than they did, and they want to learn why. The rest of the class discussion proceeds well just by following the set of questions provided in the assignment.

Can the instructor conclude the class by telling the students what the best set of choices is? No. The best set of choices will depend on a range of factors, perhaps most importantly the decision-makers' tolerance for risk.

But, are some choices clearly inferior? Yes. One obvious mistake would be to not invest all the monies that were made available. The case presents the students with a nice array of options. It would be a mistake not to invest in as many projects as possible. The project that is perhaps the most difficult to make the case for is Ptolemy. The investment amount is substantial, and the revenue is uncertain. Other projects would seem to be preferable.

### ***Optional***

I have sometimes requested that students complete a Peer Group Evaluation Form, where each member of the group must submit this directly to me. The form is shown below.



## Peer Group Evaluation Form

I. a. Your Name \_\_\_\_\_

Names of other group members:

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

II. Rate each of the group members, including yourself (as lettered above) between 5 and 1 (5 being the highest and 1 lowest)

1. Reliability in attendance at meetings

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

2. Good faith effort in doing assigned work

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

3. Reliability in doing assigned work on time

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

4. Contribution of ideas to the group

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

5. Respect for other group members' opinions

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

III. If another opportunity arises, would you work with this member again?

2—Yes; 1—Maybe; 0—Never

b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

IV. Give your overall impression of each of your group member's performances using the rating scale below:

A—Very good    B—Average    C—Below average    D—Seriously deficient

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

## VisuSon, Inc.: Business Stress Testing

### Teaching Note

#### ***Purpose of Case***

The VisuSon, Inc. (VSI) case was written to illustrate a pure “planning” (forecasting) application of budgeting—the pro forma use of the financial statement format. The case requires students to prepare plans/budgets that are not linked to any form of incentives. They are asked to consider some downside scenarios and to make judgments as to when the company gets into severe financial difficulty. In recent years, this kind of exercise has come to be known as “stress testing.” This case requires students to display understanding of the cost behavior topic included in all introductory management accounting courses and to be able to apply it in a complex real-world setting.

#### ***Assignment Notes***

I have used this case as a group project, assigned to groups of three or four students. I asked the students to prepare a short in-class presentation of their findings and to submit a short report of what they did. The case could also be used in a more traditional way, with preparation by individual students and in-class discussion of findings. But instructors should know that this is a difficult case. Students need both extra time and some Excel skills to prepare it well.

The Excel worksheets to be given to the students to aid in preparation of the case are titled VisuSon A210-01-WB.xls.

#### ***Suggested Assignment Questions***

1. Under the current budget, what is VSI’s breakeven revenue figure for 2009 and how does this compare with projected 2008 revenue? Explain.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the VisuSon, Inc. case.*

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2. What magnitude of market decline relative to estimated 2008 sales would force VSI management to take actions likely to impact the company's future growth prospects in a significantly negative way? (Note: Assume that borrowing more money would be quite difficult and/or prohibitively expensive.)
3. What magnitude of market decline would threaten the company's survival?

***Assignment suggestions/hints for students:***

Before analyzing alternative scenarios, carefully review the existing 2009 budget model in the Excel workbook provided. At minimum, you should consider the following:

- a. Why are salary and wage costs classified as they are? What impact has this classification had on the budget model?
- b. How has the ending balance in each of the asset and liabilities accounts been determined? Are these assumptions consistent with historical patterns? How might they change in response to changes in the rate of growth?
- c. What debt ratio has historically been most important for VSI? What constraint will help in maintaining or improving this debt ratio place on VSI's operations in 2009?

Begin your scenario analysis with an examination of two scenarios for which you have some historical precedent. A zero-growth and a 15% decrease scenario would be good starting choices. You may wish to start by assuming that expenditures are made according to the draft 2009 budget but production and ending asset and liability balances are allowed to adjust to changes in volume.

It would be best to preserve copies of each scenario that you analyze for comparison purposes. While there are various ways to do this, by far the easiest method is to place the pointer on the tab of the budget model worksheet and select "Move or Copy..." from the right-click menu. Be sure to check the "Create a copy" box at the bottom of the "Move or Copy" dialog box. You can use the "Before sheet" selection list to choose the ordering within the workbook. By default, copied worksheets are placed first in the workbook.

When analyzing scenarios under which VSI management chooses to lay off existing employees, assume severance costs of 20% of annual salary and wage expense for each employee. Also, consider the timing of any such layoffs and how timing will affect the level of cost reduction.

***Case Analysis***

A partial solution to the case with suggestions and annotations is provided in VisuSon Exhibits-Solution.xls.

Probably the best way to start the analysis is from the 2009 draft budget.

It is not specified in the assignment, but it is logical for students to compare the effects of scenarios of zero sales growth and declines of 10%, 15%, 20%, 30%, and 50%.

There is no single answer to the suggested assignment questions. Students will have to make a number of assumptions and judgments, including the following:

1. What will happen in a downturn? For example, prices could decline, but how price sensitive is the market? Accounts receivable might not get paid, or they might be paid more slowly.
2. What should the company do? As revenues decline, what expenses can/should be cut? Which are fixed vs. variable? Which are discretionary? In order to minimize the “pain,” in what order should the cuts (e.g., sales, manufacturing and engineering personnel, capital expenditures) be made? VSI has a long sales cycle, so if sales personnel are laid off, the company could suffer for years to come. If engineering is cut, perhaps some current intellectual property will be rendered useless. If manufacturing is not slowed, inventory will build up. Should accounts payable be stretched? If they are, VSI might lose some discounts, and if they are stretched too much, VSI might lose some suppliers.
3. Have the additional employees in the budget been hired already? If so, severance will have to be paid. If not, the easiest cost saving is just not to hire the additional employees called for in the 2009 budget. Students will have to make an assumption as to when layoffs occur (e.g., at beginning of second half of the year).
4. Will any bonuses be paid? Probably yes, as some objectives will be achieved. Plus, VSI might be at risk of losing some key employees if all bonuses are eliminated.
5. Can VSI borrow any money? The case says that VSI can borrow against the value of its accounts receivable and inventories. But how much? Perhaps 80% is a good estimate.
6. How important are the operating policies, such as “maintain 30–40 days of forward sales in finished goods inventory”?

Diligent students will consider jointly the effects of sales decline scenarios and differences in assumptions.

Most importantly, students will have to figure out what the most important “dependent variable” is. Unquestionably, it is cash flow. At some point, VSI will run out of cash, with no ability to raise additional capital, and it will cease to be a viable business. Some students focus excessively on earnings and various balance sheet ratios, such the current, quick, and debt/equity ratios. While looking at these other indicators can yield some insights, students should understand that cash flow is paramount.

Here are plausible answers to the assignment questions:

A. Question 1

The answer to this question is \$58,795. Students should see that the breakeven revenue figure for 2009 is slightly (about 2%) less than the actual 2008 revenue level. Diligent students will notice that even though 2008 was a record year, costs are budgeted to grow so much in 2009 that at flat revenue VSI will just break even.

B. Question 2

Revenues for 2006 were about 85% of 2008 revenues, so the historical financial statements in the exhibits provide a basis for comparison to any –15% scenarios. With a 15% sales

decline relative to 2008, VSI management will have to start cutting personnel in sales and engineering. Depending on how this is done, the cuts will adversely affect sales growth or product development or, probably, both.

### C. Question 3

With a 30% sales decline, VSI's survival is threatened. The borrowing base will not be sufficient to support the company's working capital needs (six weeks of operating expenditures). Perhaps VSI could borrow against the value of some of its fixed assets. But with this sharp drop in revenues, the company's current ratio will drop to less than one, which will probably make it impossible for VSI to obtain any short-term financing.

**Exhibit 1** (appended to this teaching note) shows a summary of the analyses done by one thoughtful student group. It shows the results of scenarios from flat sales to a decline of 50%, with multiple managerial options selected at some of the revenue levels.

### **Pedagogy**

When I have used the case, I have asked students to present their findings orally in class with formal PowerPoint presentations. All of the groups have had sufficient Excel skills to be able to prepare sets of numbers based on credible downside scenarios.

At the conclusion of the class, I provide some brief comments, as follows:

1. This is scenario planning (also called stress testing).
  - a. It goes beyond flexible budgeting, which typically has simple fixed vs. variable assumptions about expenses and assumed simple linear relationships.
  - b. This case illustrates a pure "planning purpose" of budgeting, as the plans are not distorted by a link with incentives.
  - c. Stress testing is useful because it shows managers how vulnerable the company is to downside scenarios, and it helps them prepare for the worst cases they might face.
  - d. The financial statement framework is useful:
    - i. It helps to maintain internal consistency of the many assumptions required.
    - ii. Cash flow information can easily be derived from it.
2. Anyone who does this type of scenario planning must know how expenses are incurred. This information is not obvious in the financial statements. Special analyses (or assumptions) are needed.
  - a. Fixed vs. variable
  - b. Discretionary vs. necessary
  - c. Some items might not be as classified as in the worksheet if revenues get outside the "relevant range."
  - d. Capital expenditures have only small effects on earnings via depreciation and amortization, but they have a significant impact on cash flow. (This should be obvious from the cash flow statement, but students tend to fixate on the income statement.)

3. What makes for a good analysis?
  - a. Done technically correctly.
  - b. Depth of insight as to what would happen in the company in various scenarios, particularly a crisis (negative 15% growth, or worse).
    - i. What is most important?
      1. Earnings?
      2. Cash flows?
      3. Financing possibilities?
    - ii. Strategic damage (risks and trade-offs, such as opportunities for future growth vs. level of safety now)
      1. Pricing (price cuts to maintain market share)
      2. Working capital management (e.g., supplier relations)
      3. Employee retention
      4. Investments (R&D and capital)
      5. Financial and leverage.

Merchant and Van der Stede, *Management Control Systems: Performance Measurement, Evaluation, and Incentives*, 4e, Instructor's Manual

EXHIBIT I

	Operating Income	Op. Income Covers Int. Exp?	Value of AR & Inventory	Required Borrowing Base by Banker (assume 80% of AR & Inv.)	ST Notes Payable Level Needed to Support Working Capital Required for Op. Cycle (wks. Op. Exp.)	Working Capital Shortage (if borr. base < min. ST notes payable needed to support op. cycle)	Working Capital Needed for 6 Weeks Operating Expenditures	Current Ratio	Total Debt over Total Assets	Break-even Sales	Margin of Safety	Our Comments Regarding Break-even Sales
1	3,746	Yes	16,788	15,831	14,153	no shortage	6,057	1.28	41.4%	56,261	3.506	
2	844	No	18,195	14,556	14,893	(327)	5,601	1.19	43.0%	54,359	(570)	Break-even can be achieved by reducing by slightly less than 11% manuf. HC or reducing both manuf. HC and S&M HC. However, possible resource constraints can occur if sales pick up later. We don't recommend force breakeven.
3	1,008	No	16,156	14,525	14,695	(160)	5,582	1.20	42.6%	54,131	(341)	Break-even can be achieved by reducing 10.5% manuf. HC or reducing both manuf. HC and S&M HC. However, possible resource constraints can occur if sales pick up later. We don't recommend force to breakeven.
4	(833)	No	17,399	13,919	15,790	(1,871)	6,450	1.11	45.3%	53,726	(2,025)	Need to significantly reduce manuf. labor, S&M & R&D HC and bonus in order to breakeven. Resource constraints & impact on product development, potential sales growth & mgmt morale. We don't recommend force to breakeven.
5	(669)	No	17,360	13,888	15,581	(1,703)	5,431	1.11	44.9%	53,497	(2,695)	Need to significantly reduce manuf. labor, S&M & R&D HC and bonus in order to breakeven. Resource constraints & impact on product development, potential sales growth & mgmt morale. We don't recommend force to breakeven.
6	(2,346)	No	16,554	13,251	16,497	(3,246)	5,280	1.04	47.3%	52,863	(5,051)	Unlikely to achieve breakeven for 27% sales decrease or beyond.
6	(5,587)	No	14,895	11,946	16,555	(6,607)	5,010	0.89	52.9%	52,000	(10,164)	
6	(5,697)	No	14,935	11,948	16,271	(6,322)	4,977	0.90	52.9%	51,593	(9,756)	
7	(8,886)	No	13,305	10,644	19,884	(9,240)	4,655	0.78	57.3%	50,096	(14,235)	
8	(13,442)	No	11,717	9,374	22,585	(13,212)	4,457	0.65	65.4%	50,096	(20,413)	
9												

## Harwood Medical Instruments PLC

### Teaching Note

#### *Purpose of Case*

The Harwood Medical Instruments case was written in response to requests from instructors who want more short cases. This case can be used in the classroom or in an exam setting where the instructor wants to use multiple cases to test different subject materials.

The case describes a company whose manager is concerned that the operating profit measure included in the company's bonus plan was too narrowly focused. He implemented a new bonus plan that reduced the weighting of importance placed on operating profit and that included more measures, including on-time deliveries, sales returns, patent applications, scrap and rework costs, and customer satisfaction.

#### *Suggested Assignment Questions*

1. What was the purpose of the change?
2. Calculate the bonus earned by each manager for each six-month period and for the year 2010.
3. Evaluate the new plan. Is there any evidence that it produced the desired effects? What changes to the new plan would you suggest, if any?

#### *Case Analysis*

**Question #1:** The change was made because managers believed that operating income was not a good summary measure of short-term financial performance. It was incomplete and excessively short-term oriented. The additional measures seem to have been considered as reflective of generic critical success factors. The additional measures could also be seen as leading indicators of future financial performance.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Harwood Medical Instruments PLC case.*

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**Question #2:** The calculation of the bonuses earned in each division is shown in the tables below.

(£000)	Surgical Instruments			Ultrasound Diagnostic Equipment		
	1	2	Total	1	2	Total
Base bonus	46.2	44.0		28.6	29.0	
Delivery adjustment	2.0	2.0		2.0	-	
Sales returns adjustment	(15.0)	5.0		(2.5)	5.0	
Patents	-	1.0		4.0	8.0	
Scrap/rework	(4.9)	(1.0)		(5.5)	-	
Customer Satisfaction	<u>(5.0)</u>	<u>(5.0)</u>		<u>(5.0)</u>	-	
Total bonus	<u>23.3</u>	<u>46.0</u>	<u>69.3</u>	<u>21.6</u>	<u>42.0</u>	<u>63.6</u>

Supporting calculations:

Sales returns:

(£000)	Surgical Instruments		Ultrasound Diagnostic Equipment	
	1	2	1	2
Std.: 1% sales returns	420	440	286	290
Actual	450	420	291	289
Δ	<u>(30)</u>	<u>20</u>	<u>(5)</u>	<u>1</u>
Bonus	<u>(15)</u>	<u>5</u>	<u>(2.5)</u>	<u>5</u>

Scrap/rework:

(£000)	Surgical Instruments		Ultrasound Diagnostic Equipment	
	1	2	1	2
Std.: 1% of operating profit	46.2	44.0	34.2	40.6
Actual	51.1	45.0	39.7	28.2
Δ	<u>(4.9)</u>	<u>(1.0)</u>	<u>(5.5)</u>	<u>12.4</u>
Bonus	<u>(4.9)</u>	<u>(1.0)</u>	<u>(5.5)</u>	=

**Question #3:** Undoubtedly, both managers are upset with the new plan. The bonus of the manager of the Surgical Instruments Division declined by 18.5% (£85,000 to 69,300). Similarly, the bonus of the manager of the Ultrasound Diagnostic Equipment Division declined by 14% (£74,000 to 63,600). The effects of the performance penalties were severe. Decreasing the size of the bonuses paid is not a good way to get manager buy-in to the new plan. However, Mr. Guthrie might have wanted to provide a strong signal that performance in certain areas needed to be improved.

There is evidence that the plan is producing some of the desired effects. In both divisions, perhaps as managers have gotten accustomed to the new bonus plan (second half of 2010), sales returns have declined, patent applications have increased, scrap and rework costs have declined, and customer satisfaction has increased. On-time deliveries increased in the Surgical Instruments Division, but not in the Ultrasound Diagnostic Equipment Division. But as a result of the performance improvements, the bonuses paid to both managers increased significantly in the second half of the year. Although this is a short period for analysis and the results might be affected by seasonality or other uncontrollable factors, the managers seem to be responding to the incentives.

Could the system be improved? There are advantages (e.g., simplicity, perceptions of fairness) to having one system that applies equally to all divisions. But these two divisions seem to be so different. Someone should consider whether the same factors should apply to both divisions and in the same weightings of importance. Should the system be built around the critical success factors unique to each division?

Each of the individual factors should be subjected to critical scrutiny. For example, should the sales returns measure capture only returns due to company faults (e.g., poor quality), rather than also merely customer capriciousness (e.g., customers changing their minds after shipment)? Should the sales returns measure be eliminated as redundant, as customer unhappiness is reflected in the customer satisfaction figures? Is customer satisfaction measured effectively? Does it/should it reflect the potential unhappiness of prospective customers who never became customers? Are patents important in a division that sells such mundane products as scissors and clamps (Surgical Instruments)? And, for that matter, is patent applications a good performance measure? Might including this measure in a bonus plan just encourage patent applications that never get approved, or even if they do, that never provide any real economic benefit to the division and company?

Several of the factors have very specific performance constraints. Should the payoff functions be linear, rather than based on perhaps arbitrary performance constraints, such as 95% deliveries on time or 90% average customer satisfaction? Such hard cut-offs often produce gameplaying.

The performance targets seem arbitrary. The targets, or performance constraints if they are used, should be based on an analysis of what is possible in each division. They could be based on a model that constitutes good performance, or based on history to encourage managers to improve, or based on what other like organizations are able to accomplish (aka "benchmarks"). Using the same targets in all divisions gives a perception of fairness that is perhaps just an illusion if the operating circumstances in each division are different, as they almost certainly are.

This plan involves the use of penalties, which are common in Asian companies but relatively rare in those in the West. Mr. Guthrie should consider whether the plan would be received better if all of the factors were considered as positives, meaning that additional bonus monies would be paid if performance targets were met.

In any case, the importance weightings of the various factors should probably be reconsidered. The sales returns adjustment factor had a huge negative effect on the bonus of the Surgical Instruments manager in the first half of 2010. By adding these additional factors to the bonus plan, the importance of operating profit has been reduced. But what is the proper balance between profit and each of these other factors? Should the bonus be paid just as the result of a numerical calculation, or should the plan allow some room for subjective judgment?

Why are bonuses paid semi-annually? Why not annually, to allow some of the variation in the performance factors to even out? Or why not quarterly, to provide more timely behavioral reinforcement?

The case does not provide enough information to answer all of these questions, but students should be able to identify the issues.

### ***Pedagogy***

This is a short case and one that intended not to be very difficult. It should lend itself to relatively unstructured class discussion formats.

## Superconductor Technologies, Inc.

### Teaching Note

#### *Purpose of Case*

This case describes the compensation and incentive plans used by a high-technology company for its top-30 managers. The company is unusual in that it has been in business for 17 years yet has never earned a profit. As such, it can still be viewed as a start-up company, but a mature one. The compensation packages consist of base salary, cash bonuses, and stock options. The case provides opportunities to discuss issues, such as measurements, style of evaluations, and payout leverage, related to, particularly, the bonus and stock option components of these packages, as well as the entire compensation system.

#### *Suggested Assignment Questions*

1. Assume that you, as an STI employee, were awarded options on 1,000 shares of STI stock today at the current market price.
  - a. Without doing a detailed numerical calculation, make your best-guess estimate as to the economic value of this option grant. What factors did you consider in making your estimate?
  - b. Would this option grant likely affect any of your behaviors? If so, how?
2. Evaluate the performance measurement and incentive system that STI uses for its top-30 managers. Among the questions you should consider:
  - a. Will the system attract managers' attention and influence behavior in the desired ways?
  - b. Is the system achieving other (non-motivational) purposes which it is also intended to serve?
  - c. Is each of the elements worth the cost?

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*This note was prepared by Professors Kenneth A. Merchant and Wim A. Van der Stede for the sole purpose of aiding classroom instructors in the use of the Superconductor Technologies, Inc. case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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- d. Is the mix of rewards optimal?
  - e. What changes would you recommend, if any?
3. Should the accounting rule change requiring the immediate expensing of the value of stock options granted (which has now happened) cause STI to make any changes to its system? If so, which?
  4. Will STI have to make changes to its system when it expands internationally and employs managers in locations such as London and Shanghai? If so, which?

## **Case Analysis**

### **1. The Company Situation**

It is useful in starting the case discussion to spend a little time clarifying the company's situation. In this discussion, the following are among the points that can be made:

- STI is the technology and market leader in the area of high-temperature superconductivity. It is trying to derive commercial value from a scientific breakthrough in this area.
- The primary application is for wireless communications. Growth in this area is rapid, but the companies in the communications industry are currently reluctant to make significant capital expenditures because of overcapacity.
- STI is a public company. The stock price spiked in 2000, but it is now quite low.
- The company has never made a profit in the 17 years of its existence.
- The company has nearly 300 employees.

### **2. The Compensation Package**

Useful points can be brought up about the individual elements of the company's compensation system for the top-30 managers and the overall package. The system consists of three elements.

#### **A. Base salary**

Base salary is intended to be competitive. Raises are generally modest. There is not much to be discussed here.

#### **B. Cash bonuses**

Up through 2002, bonus awards were based on a judgment from the Compensation Committee of the Board of Directors about overall corporate performance, taking both financial and non-financial measures into consideration. The evaluation was subjective, not formula-based. Sales revenue seemed to be the single most important factor considered.

After 2002, the bonus awards were based 75% on corporate performance and 25% on individual performance, with judgments about both areas of performance still made by the Compensation Committee. Individual performance was judged based on a tailored set of

performance areas, as in an MBO system. If the Compensation Committee did not know enough about the performance of each individual, they asked the CEO for more information.

The target bonuses varied by organization level, from 25 to 40% of base salary. Since the bonuses based on corporate performance could be 20% higher than target and individual performance bonuses could be 50% higher than target, the maximum bonus for someone with a 40% target bonus was 51% (which is  $40\% \times 0.75 \times 1.2 + 40\% \times 0.25 \times 1.5$ ).

### C. Stock options

All STI employees received stock options. Lower-level employees received only a few hundred options. But STI's CEO received 125,000 options in 2002 (see Exhibit 5 of the case).

Depending on the audience, instructors can get into more or less detail about how options work and how they should be valued. Some audiences, such as undergraduate and some foreign students, know almost nothing about options, so some time has to be spent here to ensure that they can participate in the evaluative discussion. If instructors wish to do a mini-lecture on stock options, here are some of the key points to emphasize:

- Options are “call” options. Holders have the right, but not the obligation, to purchase the shares at a specific “exercise” or “strike” price, which is typically the stock price at the time of the grant.
- The options must be exercised before a defined maturity or expiration date, which is typically 10 years from the grant date.
- Most, but not all, options have a vesting period usually of between three and five years. Until the options vest, the holder cannot exercise it. An example of a common vesting schedule is 25% during each of the four years after grant.
- Option holders do not usually receive dividends. They make a profit only on appreciation of the stock price beyond the exercise price.
- Option owners receive the full value of upside appreciation, but their downside risk is limited. Once the stock price falls to the exercise price, the option payoff remains at zero, even if the stock price falls further. Because of this, stock price volatility is good for option holders; they benefit on the upside, but their losses on the downside are truncated.

Suggested assignment question 1a is aimed at getting students to think intuitively about what options are worth and whether they affect people's behaviors. The question is phrased in terms of the company's current market price. If it phrased in terms of an historical price (e.g., January 1, 2007), students have a tendency to log onto the Internet to see what the current price is. Then their judgments are affected by “hindsight bias.” To clarify the issue, we think that the best way to ask this question in class is as follows:

You have been given 1,000 options today. What is the minimum price at which you would be willing to sell them to me?

Record the students' responses in ranges on the board, and you will find huge disparities in the answers. In actuality, most people do not have a good intuitive feel for what options are worth.

So what are options worth? Sometimes we put a form of the Black-Scholes option pricing formula on the classroom screen (see Exhibit TN-1). Unless the class is at an advanced level, it is not necessary, and probably not desirable, to go through the details of the Black-Scholes formula and a sample calculation, or even to tell students that there are other option pricing models (e.g., the binomial model, which is also called the lattice or binomial-lattice model). However, it is important to show students the parameters that affect option values (i.e., stock price, options exercise price, time until expiration, stock volatility, interest rates). (Dividends are not included in the Exhibit TN-1 formula. If the company pays dividends, then that reduces the value of the options.)

It is possible to look at recent financial statement filings to see how the company has valued its options. That disclosure is now mandatory. With the stock at prices less than \$5 per share, the value of a single STI option is less than \$2.00.

The Black-Scholes formula provides a theoretical valuation of options; it is usually said to provide an *upper bound* on the value of an option. It assumes that the holder has a diversified portfolio of assets and they exercise the options optimally (e.g., hold until expiration). Research models and evidence have shown that most people's options are worth less than the Black-Scholes values. Most people's portfolios are not well diversified; in particular, they are over invested in their company's stock. And, they do not exercise the options optimally. In addition, most people do not understand options well, and their intuitive feeling about the value of the options is less than the options' real value.<sup>1</sup>

### 3. Issues That Might Be Discussed

After students understand the elements of the compensation package, the instructor can raise any of many issues that might be usefully discussed, including the following:

1. ***Is this the right mix of incentives? In particular, why not pay all salary or all performance-dependent compensation?***

Answering this question requires an understanding of the purposes served by the various elements of compensation. They include:

- a. Attract and retain the right people;
- b. Motivate behaviors that serve the organization's interests;
- c. Share the wealth that is created (employee welfare as a goal);
- d. Make expenses (and cash flows) smoother; i.e., more variable with performance;
- e. Provide a living wage.

The use of more than one compensation element is typically necessary to serve all the desired purposes. The performance-dependent elements are aimed at one or more of the first four purposes. They help motivate, share the wealth, make expenses more variable with performance, and attract some types of good employees, particularly those who are confident of their abilities. The higher the proportion of compensation that is performance-dependent, the more these purposes are served, in general.

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<sup>1</sup> See, for example, J. E. Ingersoll, Jr. (2006), "The subjective and objective evaluation of incentive stock options," *Journal of Business* 79: 453–487; and S. Huddart and M. Lang (1996), "Employee stock options exercises: an empirical analysis," *Journal of Accounting & Economics* 21: 5–43.

However, few companies compensate employees solely with performance-dependent payments. Most people need a basic level of guaranteed compensation to, among other things, make their mortgage payments. And, since most people are risk averse, if the company makes the compensation payments contingent on performance, it will have to pay the employees a "risk premium." Over time, this will cause compensation expense to be higher than it would had employees received only straight salary. So there are advantages to compensating employees with guaranteed payments; i.e., straight salary.

2. ***Are the measures considered in the bonus plan the right ones?***

This is a difficult question to answer. The corporate "performance scorecard" includes 12 measures that are not weighted or even prioritized formally. Are these the right measures? Are they contemporaneous or leading indicators of value creation? They are typical measures, but certainly examples can be cited where improvements in some of these measures is not desirable. For example, it can be good news when receivables increase and on-time delivery performance deteriorates if those effects are caused by sharply increased sales. The evaluators, in this case the Compensation Committee of the Board, need to look at the entirety of the picture in order to reach its conclusions.

Balanced Scorecard proponents would feel more comfortable with this set of measures if they were linked more directly with the company's strategy, as in a "strategy map." Clearly, these measures were included in the performance scorecard because of the Board's and/or top management's intuitive feel about the importance of each of these performance elements. Whether the set of measures would be improved if STI went through a formal strategy mapping process is unknown; only anecdotal evidence exists at this time to support this notion.

Most STI employees can have little or no effect on the measures included in the corporate scorecard. So, for them, 75% of their bonus is based on uncontrollable factors. The individual performance factors were added in 2002 to improve the controllability. A reasonable set of performance measures can probably be developed for each individual, but why is the importance weighting so low?

3. ***For bonus award purposes, why is performance evaluated subjectively?***

Some companies use formula-based bonus plans; others assign bonuses subjectively. There are advantages and disadvantages to both approaches, many of which apply in the STI situation.<sup>2</sup> The advantages of subjectivity include:

- a. It provides flexibility. Evaluators can exploit the full set of information that is available at the end of the evaluation period, some of which might not have been anticipated or even estimable at the beginning of the period. It can be used to adjust for performance targets that, in retrospect, were too difficult, or too easy.
- b. It makes possible adjustments for flaws in the measures. Measures might be, for example, incomplete, incongruent with the organization's goals, or affected by factors over which the manager had little or no control.
- c. It can be used even in the absence of well developed measurement systems.

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<sup>2</sup> M. Gibbs, K. A. Merchant, W. A. Van der Stede, and M. E. Vargus (2004), "Determinants and effects of subjectivity in incentives," *The Accounting Review* 79(2): 409-436.



The disadvantages of subjectivity include:

- a. The criteria used in the evaluations can be vague. Those being evaluated might not be told how their performance was evaluated.
- b. Subjective evaluations are subject to biases and vagaries (e.g., caused by the evaluators' mood swings). In fact, evidence has shown that most people do not like to be evaluated subjectively. It adds another element of risk. However, satisfaction with subjective evaluations increases sharply where those being evaluated trust their evaluator(s).
- c. It is too easy to give bonuses, or other forms of reward, even when they are not earned, such as when the manager benefits from good luck. It is just human nature.
- d. Subjective evaluations often lead to politicking behaviors, as those involved try to influence their evaluator's judgments.

4. ***Does having options make people do anything differently?***

This is question 1b in the suggested assignment question list.

People like having options. They have value, and they provide a sense of ownership of the firm. The sense of ownership can provide "cultural control" benefits. Employees whose fortunes are intertwined can control each others' behaviors to some extent.

However, other than this cultural control effect, for lower-level employees we think the only positive answer to the question posed above involves decisions as to whether or not to stay with the firm. If employees have in-the-money options that will vest soon, they are inclined to remain with the firm in order to realize that value.

In terms of effects on lower-level employees' decision-making and motivation, the answer to this question is largely no. Except in rare cases, lower-level employees have no material impact on the performance of the entire corporation. Therefore, they cannot directly affect the value of the options with anything they do.

Options might affect the motivation and decisions of top executives, however. Their actions can have an effect on the overall performance of the firm. As compared to annual bonuses, for example, options can make top executives take a longer-term view. Option grants encourage, rather than discourage, long-term investments, and potentially mitigate short-term gameplaying activities. Further, options induce greater risk-taking, such as investing in risky projects and less hedging because, as was noted above, the upside benefits to the executives are greater than the downside losses.<sup>3</sup>

It should be noted, however, that in some cases options can actually have a negative effect on motivation. If the bulk of the options are "underwater," as they are at STI, employees can be discouraged and be prone to move to a company that is performing better.

5. ***Should the new accounting rule requiring the expensing of the value of stock options granted change what the company does?***

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<sup>3</sup> See, for example, S. Rajgopal and T. Shevlin (2002), "Empirical evidence on the relation between stock option compensation and risk taking," *Journal of Accounting and Economics* 33: 145–171.

This is suggested assignment question 3. The answers are complex. FAS #123R, requiring the expensing of the costs of stock option grants, became effective in mid-2005. Research has suggested that, whether or not it should, this new accounting rule will have significant economic consequences.<sup>4</sup>

Are companies reducing their use of stock options now that they have to record the expense? There is anecdotal evidence that they are. For example, Microsoft Corporation no longer makes stock option grants. However, large-scale research findings on this issue have not yet been published.

This issue can be applied to the STI case. Pose the following question to the students: Should the new accounting rule affect STI's use of stock options? Points can be made to support either no or yes answers to this question.

No effect:

1. This is just an accounting change. There are no real cash flow effects. Financial statement users can easily make an adjustment for this change because the full effects of the change are disclosed, so this change should have no effect on stock prices in an efficient stock market.
2. The other benefits of the use of stock option compensation, such as the ability to compensate employees while conserving cash; the tax benefits of deferring compensation; and the ability to attract less risk-averse employees, remain intact.

Yes, less use of stock options:

1. Because STI makes significant use of stock options, the company's net income will drop. If financial statement users are fixated on net income, and some inevitably are, this change could have adverse effects on the company's stock price and/or ability to raise debt capital.
2. After seeing the amount of expense that they are forced to record in their financial statements, STI managers might understand better the real costs of stock option grants. This improved understanding might lead them to substitute less expensive forms of compensation.

6. ***What should the company do if and when it expands internationally?***

This is suggested assignment question 4. The answers to this question are also complex.

Should national differences, such as in cultures, tax rates, or labor markets, affect the use and effects of stock options? The answer is probably yes, although all these effects are not well understood.

One important factor to consider when moving internationally is employee understanding about how stock options function. That understanding is higher in more developed countries.

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<sup>4</sup> See, for example, W. Guay, S. P. Kothari, and R. Sloan (2003), "Accounting for employee stock options," *American Economic Review* 93: 405-409.

## **Pedagogy**

This teaching note is laid out in the order in which we have raised the issues in class. Instructors will have to consider the backgrounds of their students carefully in using this case and, in particular, how much they know about the functioning of stock options. This is a rich case. There are many optional tangents that instructors can go down if they so choose, most of which have been discussed in this teaching note.

### **Exhibit TN-1**

#### **Black-Scholes Option Pricing Formula**

## **Black-Scholes Option Pricing Formula**

$$C = S \cdot N(d_1) - X \cdot e^{-rT} \cdot N(d_2)$$

Where:

- $C$  = price of the call option
- $S$  = price of the underlying stock
- $X$  = option exercise price
- $r$  = risk-free interest rate
- $T$  = time until expiration
- $N()$  = area under the normal curve
- $d_1 = [\ln(S/X) + r + \sigma^2/2]T/\sigma T^{1/2}$
- $d_2 = d_1 - \sigma T^{1/2}$

Assumptions:

- Option is exercised only at expiration.
- Volatility of the stock price remains constant over the period of analysis.
- No dividends are paid.

## Raven Capital, LLC

### Teaching Note

#### *Purpose of Case*

The Raven Capital case was written to illustrate an interesting apparent contradiction in many firms in the hedge fund industry, including Raven Capital. These firms have access to many objective performance measures, and sector performance benchmarks are available for evaluating performance, yet the performance evaluations of many the hedge fund employees are done totally subjectively. The focus of this case is on the performance evaluations of hedge fund analysts. Studying this case helps students to understand the limitations of the available measures and benchmarks and the advantages and disadvantages of subjective performance evaluations.

The case can also be used to focus attention on the incentive structures used in the industry and Raven Capital in particular. The compensation of employees in hedge fund organizations is quite lucrative. Instructors can ask students if these employees “earn” the high compensation that they are paid or if the high compensation is evidence of a flaw in either the corporate governance or regulatory system.

Finally, the case can be used just as an industry application of issues and principles discussed in conjunction with other cases. Many students are curious about the hedge fund industry but know little about it. As such, the case offers nice opportunities for “secondary learning.”

#### **Suggested Assignment Questions**

1. Play the role of a Raven portfolio manager who has to allocate a bonus pool to the four analysts working for him. Assume that Raven earns a 20% incentive fee and that all of the 2009 returns were above the funds’ high water marks. Use 30% of the incentive fee as the bonus pool to be allocated to the four analysts whose backgrounds and 2009 portfolio performances are described in Assignment Figures A and B (appended at the end of this teaching note).

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Raven Capital, LLC case.*

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- a. How would you allocate bonuses to these four analysts? What alternatives did you consider? Why did you make the choices you did?
  - b. Is there any other information you would like to have had available before making your decisions? If so, which?
  - c. Do you think you should pay out the entire bonus pool this year, or hold some money in a “bonus bank reserve”? Why or why not?
  - d. Should the proportions of the bonuses allocated vary depending on the size of the bonus pool available? Redo the allocations of the bonus pool to these four analysts assuming that because of a high water mark constraint, the incentive fees earned in 2009 were only \$300,000.
2. Evaluate the Raven performance evaluation and incentive compensation system. What changes would you recommend, if any?

## **Case Analysis**

### **A. Background Discussion**

It is useful to start the class by clarifying what a hedge fund is, and is not. I write the following labels on the board:

- Hedge fund
- Private equity fund
- Venture capital fund
- Mutual fund
- Stock brokerage

I ask students to compare and contrast these types of organizations. Here are the conclusions that I want them to reach:

1. The first four types of organizations include pools of investment capital.
2. The first three solicit monies from “qualified” or “accredited” investors who are sophisticated enough that they can “fend for themselves.” This limitation exempts these organizations from some legal requirements designed for investor protection, such as the production of a prospectus. Instead, the investor safeguards include redemption rights, audits, asset valuation procedures, portfolio transparency, and fund governance requirements.
3. Private equity funds invest their own monies (in the sense that they are typically fixed-term limited partnerships (e.g., 10 years) to which investors contribute funds, which are then drawn over the term of the fund; undrawn funds are called “dry powder” in industry parlance). Hedge funds, venture capital funds, and mutual funds invest others’ monies.
4. There is considerable variety even within the private equity, hedge fund, and venture capital fund categories, as the organizations can have different goals, different investment specialties, and different philosophies about the extent to which they wish to play an active

management role in the companies in which they invest. In general, venture capital funds invest in start-up and young businesses. Many hedge funds maintain a portion of their portfolios in a “short” position.

5. Mutual funds have smaller capital requirements, so they can accept monies from smaller investors. They are paid based on share of the assets invested, not the returns generated.
6. Stock brokers provide advice and complete trades for investors, but they cannot take a share of the returns.

Focusing more specifically on hedge funds, I ask the following questions:

1. What is the objective of a hedge fund? Create value. Generate risk-adjusted returns in excess of those of the market. In other words, generate “alpha.”
2. Where do hedge funds get their money? From large investment pools, such as retirement funds.
3. Where do they invest? Stocks, bonds, commodities, real estate. Actually, potentially any type of asset.
4. How do they make money? Generally, they earn 1–3% of assets under management (AUM) plus 20–50% of the profits generated.
5. What constraints and regulations do they face? There are many. For example, hedge funds cannot approach prospective clients directly. They must be introduced.

If instructors deem it worthwhile, they could explain why US-based hedge funds are being required to “register” with the federal government for the first time in their history. They are being asked to provide information about their size, their investors, and their risk (e.g., who they owe money to). The government is being given the authority to conduct on-site compliance audits looking for, among other things, violations of securities laws, conflicts of interest, inadequate or misleading disclosures, insider trading/market manipulation (e.g., improper short selling), and employment of individuals who should be barred from the business. Governments are also interested in understanding whether the institution is in a position to ruin, or harm, the financial system. One problem with all these disclosures, though, is that the hedge funds do not want to disclose publicly their investing strategies. They guard those very carefully.

## B. Raven

Then the attention should be directed to Raven. Students should understand some of the basic facts describing Raven and how Raven is different from other hedge funds in terms of:

- Size (less than \$1 billion in AUM)
- Sources of funds (pension funds, funds of funds, high net worth individuals)
- Investment strategy
  - Focus on domestic equities in five industries.
  - Have a “long bias,” with the long position exceeding the short position by about one-half.

- Does not make “market bets” (e.g., try to predict market movements based on macro-economic trends). Raven relies on performing superior analyses of individual stocks. The analysts are looking for “inflection points” in the valuations of individual stocks.
- Investment goal (beat the S&P by 6–10% per year)
- Fees (1% of AUM, which is lower than the hedge fund average)
- Liquidity greater than competition (no lockups or gates)
- Employees (17 total)
- Performance (excellent)

Direct students' attention to Exhibit 4 in the case, which shows the performance of Raven's largest fund, which is called “The Fund.” I find it useful to go down the list to make sure that students know what the abbreviations (e.g., LMV, SMV) and terms (e.g., VaR 95%, Sharpe ratio) mean. I want to leave students with the conclusion that Raven can measure its funds' performances in many, many ways and with precision to many significant digits. Students should also understand that Raven does, indeed, “beat the market.” This fund's annualized return since inception is 15.11%, as compared to the 7.34% increase of the S&P 500, even though it is less risky than the overall market ( $\beta = .62$ ). All of these numbers are net of fees, which is what the SEC requires them to report.

Before turning to the key exercise, the allocations of bonuses to analysts, it is useful to clarify some facts about the analysts. They are fairly young (the oldest is 35 years). They are well compensated, with a minimum annual salary of \$180,000 plus a bonus that ranges between \$150,000 and several million dollars.

### C. The Bonus Allocation Exercise

The bonus allocation question requires the allocation of \$5,607,000 to the four analysts. The total return is \$93,450,000. Raven's share of that is 20%, which equals \$18,690,000. The analysts get 30% of that amount.

I suggest asking several students to reveal and explain their bonus allocation answers. I have found that students' answers vary significantly. It is informative for all to see those differences and understand the reasons for them. Some students rely heavily on the quantitative performance indicators, and others do not. Some look primarily at absolute returns, and others compare with industry benchmarks. Some make use of more subjective factors, such as employee tenure, teamwork, and/or the mental carry forwards from prior years, and others do not. Some are more egalitarian in their allocations, while others want to reward heavily the analysts that they consider the best performers. The more variance in well-thought-out student answers, the better for pedagogical purposes.

When I had Max Stoneman come to class, he revealed his answer to the assignment question, which is shown in Teaching Note Exhibit 1. Max started his analysis by calculating each analyst's “fair share” of the bonus pool based solely on the returns generated. Since the analysts' pool is 30% of Raven's earnings which, in turn, is 20% of the returns, the analysts' share of the returns generated is 6%. As Max observed, “This is an ‘eat-what-you-kill’ business, and 6% is an initial cut at the fair share of what the analysts generated for Raven.” This 6% is shown in TN Exhibit 1 as the “6% flow-through.”

Then Max made the following observations about each of the analysts:

Nick: (+) was the biggest contributor to performance

(-) not that well hedged (650/250); had 74% of the firm's net exposure to the market

(+) outperformed a strong sector

(+) greatest seniority, well respected by PMs

James: (+) very well hedged

(+) ROIC on net exposure was double the index return

(+) The top performer last year. He could be seen as having "saved" the firm; he was not adequately compensated for that performance

(+) had a \$7M save not reflected in the numbers

Kate: (+) second biggest contributor to performance

(+) highest ROIC on net exposure

(+) solidly outperformed index return

(-) not effective at filtering ideas; PMs had a heavy influence on her performance

Chris: (-) smallest contributor to performance

(+) stocks beat the index, but PMs under-allocated exposure

(-) sector down and net short, but didn't impact performance

(-) least seniority, not well liked by team members

Note: Max said that none of the analysts at Raven runs a book as short as that attributed to Chris in the assignment example. At Raven, they do not make overall bets against the market or against individual industries.

Some other judgments by Max:

- In making his judgments, he started with the outliers (Chris, and then James). He would pay out the entire bonus pool in 2009 since 2008 was a bad year for compensation.
- If he had had the information available in this assignment, he would have considered the size of the losses suffered in the prior year(s).
- A bonus pool of \$300,000 would be allocated \$100,000 (33%); \$125,000 (42%); 50,000 (17%); and 25,000 (8%). This is essentially the same ratio as for the larger pool, but with some rounding.



#### D. Other Issues

Depending on instructor preferences, other issues might also be raised, including the following:

1. Is the high compensation in this industry justified or evidence of poor governance or regulation?

Most business students conclude that the high compensation is justified. After all, the few people in this industry create significant value. They bear considerable risk, although the risk is really earnings volatility. (Most students conclude that just going down to the base salary of a minimum of \$180,000 would not be a major problem.) The hedge fund employees are the “best of the best,” as these jobs are very hard to get. And labor markets seem to have reached an equilibrium at these high levels. These firms would not exist if investors were not willing to pay these levels of compensation. The hedge fund firms have to offer the high compensation in order to attract the best talent.

Of course, other populations of students might reach different conclusions.

2. Why not provide a formal incentive for beating indices?
  - One danger here is that the firm is not paid that way. If the analysts beat their indices in a down market, Raven might be obligated to pay more in bonuses than the firm earned. In this sense, the existing bonus arrangement provides a “wealth sharing” purpose.
  - Another problem is that none of the indices is perfect. For example, if an analyst recommends an investment in Apple stock, is the right index for comparison the technology index or the consumer products index? Are American Express and Visa International in the same industry? Most students would say yes, but American Express is considered a financial services company, while Visa is a technology company.
3. Why not reward multi-year performance? For example, put earnings in a “bonus bank” that could smooth compensation through lean years. This could also help with retention, as employees would be less prone to leave if they had balances remaining in the bonus bank.

Whenever profits are retained, such as would be true if the bonus bank idea was implemented, they are immediately taxable. The principals would have to pay those taxes. Hence, the principals prefer to pay the monies immediately to the employees, to let them pay the taxes.

4. Would it be a good idea to do the performance reviews in September and then allocate the bonuses in December?

To this idea, Max responded, “Probably so. When the discussions are about money, people don’t listen to constructive feedback.” But to date they have not made this change.

#### E. Evaluation of the Raven System

As with almost all systems, the Raven evaluation system has some plusses and minuses:

Plusses:

1. Takes a lot of factors into consideration.

2. The analysts seem to trust the PMs.
3. It seems to be a fair, repeatable process.
4. The system recognizes that the company only has so much money to pay out.

Minuses:

1. A lot of objective data are not being used.
2. The high use of subjectivity is not scalable. Max conceded that Raven could not use this system if the company had 50 analysts. It would be too difficult to be informed about what everybody was doing and whether they had been treated equitably in the past (mental carry forwards).
3. Evaluation feedback is limited. Some ambiguity. The constructive part of the feedback is dwarfed by the focus on money.
4. A downturn in the market can cause turnover because analysts might see high water marks that will make it difficult, if not impossible, to earn significant bonuses in the short term.

Students will have many suggestions for improvement. For example, some will suggest more use of quantitative information, performance targets or hurdles, bonus banks, and/or longer-term incentives.

#### F. Other Observations by Max

Other observations by Max that might be usefully inserted in the class discussion, as appropriate:

- The fund cannot pay directly for ideas that are not earning money.
- The analysts do not write checks for losses they might generate.
- The analysts do not make the investment decisions. The PMs do.
- Some hedge funds try never to lose money, but to do so they must give up some upside. That is not the way Raven operates.
- Equity ownership for the analysts might work as a compensation device.
- Raven has had only two down years in 26 years. 2008 was the biggest year on the downside. They faced some angry investors.
- Analysts prefer to invest long. They have to be ordered to take short positions “for the good of the team.”
- Tracking hypothetical portfolios based on analyst suggestions would create a lot of work. It would also raise some questions that would be impossible to answer. For example, if the recommendation was to sell, at what price would the firm have been able to exit at? It might be an illiquid stock. How would the hypothetical portfolio deal with the stop loss rule that the firm uses?
- Is all this perceived as “fair”? Not always.

- “Analysts’ memories are like a steel trap for things they did well.”
- “Most of the time the analysts think they are worth more than we think they are worth.”
- Analysts do not write reports at Raven. All the reports are verbal. (Analyst reports are written at some other firms.)

#### G. The Advantages and Disadvantages of Evaluating Performance Subjectively

I find it useful to close the class by getting students to consider generically the advantages and disadvantages of evaluating performance subjectively. This discussion can be summarized as follows:

##### Advantages

1. Can correct for “bad” measures (e.g., those that are incomplete or excessively short term-oriented)
  - a. Raven managers believe that everyone’s ideas contribute to the good of the firm.
  - b. Everybody has a specialty, and the market favors only some stocks over any given short time period.
  - c. The measures do not capture the effects of ideas that the analysts come up with that the company does not act on. For example, one PM chose not to put much money in health care stocks because of uncertainty over the Obama health plan. This was not the health care analyst’s fault.
  - d. It’s hard to measure lost opportunities or “wheel spinning.”
2. Can exploit new, relevant information that arises during the measurement period (recalibration). Adjust for the effects of uncontrollables. Eliminate the “forecasting error” if performance targets are set.
3. Retain top management power. (This does not seem to be a concern for the Raven PMs.)

##### Disadvantages

1. Can be biased/unfair.
2. Can be perceived to be unfair, particularly if the evaluator’s judgments are not trusted.
3. Can motivate the subordinate to try to “influence” the evaluations (politicking, excuse making).
4. Can cause ambiguity in the reasons for evaluation. Poor feedback.

## **Pedagogy**

The focus for the class discussion should be the analyst performance evaluation exercise. Instructors should leave adequate time to solicit multiple student solutions, to have the class consider the merits of those solutions, and to think about why, with all the performance metrics available in this industry, the performance evaluations are (and should be?) done subjectively.

The big variable in allocating class time will be in the early part of the class—e.g., clarifying what a hedge fund is, and is not, and what the various performance metrics mean. This part of the class is essential with relatively young and unsavvy students. It can be reduced or even skipped when using the case with students with a strong finance background.

**Teaching Note Exhibit 1**

**Analyst Bonus Determination (prepared by Max Stoneman)**

	Gross Exposure (\$M)	Total Return	Net Exposure (\$M)	ROIC	@6% flow-through (\$M)	Bonus Recommendation (\$M)
Nick (Consumer)	900.0	43.2	400.0	11%	2.6	1.8
(% of total)	40%	46%	74%			32%
James (Healthcare)	900.0	18.0	100.0	18%	1.1	2.1
(% of total)	40%	19%	19%			38%
Kate (Tech)	300.0	30.0	90.0	33%	1.8	1.2
(% of total)	13%	32%	17%			21%
Chris (Financials)	150.0	2.3	(50.0)	NM	0.1	0.5
(% of total)	7%	2%	-9%			9%
Total	2,250	93.5	540.0	17%	5.6	5.6

## Assignment Figure A

### Background Information about Four Raven Analysts

**Nick Steinberg (NS)** has been with Raven for 10 years, longer than any other analyst. He has a BA from Cal Tech and an MBA from USC. Nick analyzes consumer stocks, a sector which performed very well in 2009. Nick's stocks were responsible for most of Raven's fund's long returns. He communicates well with the PMs, and there is a great deal of trust between them.

**James Johnston (JJ)** has been with Raven for 8 years. He has a BS from UC San Diego. James analyzes healthcare stocks. He is thought to have been a consistently strong performer during his tenure at Raven. In 2008 his stocks generated significant profits for Raven, but the management team believes that he was not adequately compensated for his 2008 performance because the bonus pool was small. This year James' stocks only returned +2%, despite the fact that the healthcare index fund was up +8%. His poor performance is explained by his heavy weighting in short positions. But James was said to have saved Raven \$7 million by recommending that they exit their position in a large healthcare provider shortly before the company lost a large government contract and its stock price plummeted.

**Kate Landry (KL)** has been with Raven for 5 years, with a prior industry focus on technology stocks. She has a BA from USC and an MBA from Wharton. Kate's stocks delivered strong returns, even though relatively little capital was allocated to them. Kate's stocks solidly outperformed the tech indexes, but the PMs were not sure that Kate should be given full credit for choosing the stocks. She was perceived not to be very effective at filtering ideas. On average, the PMs estimated that they had to sort through about 20 of her ideas to find one that they were willing to invest in. Although they had not done the calculation, the PMs believed that if they had implemented all of Kate's recommendations that their results would not have been nearly as strong.

**Christopher (Chris) Frost (CF)** has been with Raven for 3 years. His specialty is financial stocks. He has a BS from Columbia University. The financial sector was down in 2009, and very little capital was allocated to it. But Chris's stocks beat the industry index. He could also point to a list of recommendations he made that were not implemented by the PMs but that turned out, in retrospect, to be winners. He insists that he could have earned the fund an extra \$10 million, had the PMs allocated more capital to his ideas. But Chris is seen by some Raven employees as being arrogant and stubborn, and he is not among the more popular members of the Raven team.

**Assignment Figure B**  
**Information on the Performances of the Portfolios of Four Raven Analysts, 2009**

Analyst	Short		Long		Total		Industry Benchmark
	Dollars Allocated (\$000)	% Return	Dollars Allocated (\$000)	% Return	Dollars Allocated (\$000)	% Return	
NS	\$250,000	1.2%	\$650,000	6.2%	\$900,000	4.8%	9%
JJ	\$400,000	-6.8%	\$500,000	9.0%	\$900,000	2.0%	8%
KL	\$105,000	1.1%	\$195,000	14.8%	\$300,000	10.0%	5%
CF	\$100,000	1.8%	\$50,000	0.9%	\$150,000	1.5%	-2%
Total	\$855,000	-2.5%	\$1,395,000	8.2%	\$2,250,000	4.2%	6%

## Behavioral Implications of Airline Depreciation Accounting Policy Choices

### Teaching Note

#### *Purpose of Case*

It seems obvious that firms' choices of accounting policies will affect managers' decision-making. But somehow when accounting choices are being considered, the financial reporting implications of the choices seem to dominate.

This case was written to force students to consider the decision-making implications of one seemingly important accounting policy choice decision. The example is of aircraft depreciation accounting for airlines. This example was chosen because property, plant, and equipment (PP&E) typically comprises more than 50% of the total assets of an airline, and aircraft are a large proportion of the PP&E. Further, airlines depreciation policies vary significantly.

#### *Suggested Assignment Questions*

This case was used successfully as part of a final exam. The exam questions, which are shown below (importance weightings in parentheses), can be adapted for use in a classroom setting.

- (50%) 1. Assume that at least some rewards for the management team (and, hence, also other employees) are based on performance measured in terms of accounting income and returns on net assets. Also assume that all of these airlines are growing; that is, they are adding to their fleet size.

What are the behavioral implications of each of the three depreciation-related accounting policy choices: (1) depreciation patterns (i.e., straight-line vs. accelerated); (2) estimated useful lives; and (3) residual values? Consider, at a minimum, the effects of each of these choices on decisions regarding:

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*Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Behavioral Implications of Airline Depreciation Accounting Policy Choices case.*

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- a. Replacements of aircraft in service;
  - b. Pricing, assuming that prices are at least somewhat dependent on costs;
  - c. Evaluations of routes or lines of business;
  - d. Evaluations of managers, assuming that negotiated budgets provide the primary standards of performance.
- (20%) 2. Assume that in a particular US airline company there is a conflict between the benefits of conservatism vs. liberalism in depreciation accounting. That is, for this company conservatism in depreciation accounting is greatly preferred for financial reporting purposes (for whatever reason) but for internal purposes the company would be better off if the policies were more liberal, or vice versa. Would you recommend to the managers of this company that they adopt a third set of books? That is, should they maintain one set of books for financial accounting purposes, another set for tax purposes, and a third set for the purposes of running the business?
- (30%) 3. If the managers of a particular airline do not want to maintain a third set of books, should they tend to be conservative or liberal in their aircraft depreciation accounting? Explain.

### **Case Analysis**

One question that can be usefully posed is: Why do airline companies choose different depreciation policies? These decisions seem to be driven by financial reporting concerns. More liberal depreciation policies can be used to hide losses. More conservative policies can be used to create hidden reserves that facilitate managers' *management of earnings*.

To a lesser extent, the economic realities are different. Some aircraft depreciate faster than others. These effects are generally smaller than most people assume, however. Virtually every aircraft can fly almost indefinitely with proper maintenance.

And, students should understand that the lives of aircraft can be greatly affected by management decisions. Aircraft lives are longer if the airline cannot afford to, or chooses not to, replace them; if there is an economic downturn that causes the aircraft to be used less intensively; and if there are no new technological developments (e.g., fuel efficiency, noise, comfort). One issue that can be usefully explored in this class is: Which comes first, the accounting policy or the management decisions? Each can have a causal effect on the other.

Another useful question is to ask students which of the airlines mentioned in the case uses the most liberal accounting policy for its aircraft? Which uses the most conservative? Looking at the assumptions of aircraft lives will suggest to all that Singapore Airlines is the most conservative. Delta appears the most liberal.

### **Question 1**

What are the effects of this accounting policy choice on managerial decisions? More rapid depreciation causes higher expense on the income statement but reduces aircraft book values on the balance sheet more quickly. But, interestingly, the reality does not change at all! In the United States, there are no tax effects and no cash flow effects, and the economic value of

the company does not change. Academic studies have shown that the stock market is very good at seeing through fully disclosed differences such as these.

Some students get confused about this issue because they do not realize that in the books US firms keep for tax purposes firms will depreciate their aircraft as quickly as possible, assuming that the company is profitable. The case tries to make this clear, in item #5 in the list of “other facts.” In some other countries, the allowed disparities between the financial reporting and tax books of record are not as significant.

While there are no direct effects of this accounting policy choice on real firm value, value can be affected because managers' decisions can be affected. Managers do make decisions based on accounting numbers. One of the clearest behavioral implications of depreciation accounting policies is in the replacement-of-aircraft decision. Managers in firms that depreciate aircraft slowly tend to be slow to replace their aircraft because they have to absorb the write-off of the remaining book value. This is a known empirical regularity. For example, Singapore Airlines and Lufthansa have quite young fleets (e.g., Lufthansa average age is 3.9 years), while companies such as American Airlines and Delta have fleets that are older. Although one must add that fuel prices also play a role in the replacement decision: when fuel prices are high, the economic incentives are greater to replace old planes with newer, more fuel-efficient ones. Similarly, more rapid depreciation will yield higher full costs in cost analyses and can affect pricing decisions and route/line of business analyses. Management evaluations, on the other hand, should not be affected because whatever depreciation policies are chosen are built into the budgets that are the primary performance standard.

In theory, management decision-making should be improved if the accounting records reflect the economic reality. We know, for example, that the early US railroad companies did not depreciate their fixed assets. As a consequence, the railroads overstated their income and assets, and the railroad managers were misled by their own financial statements. Ultimately about 50% of the track put in place before 1900 was placed in receivership.

But what is the “real” economic depreciation of aircraft? The reality will vary somewhat with the type of plane and the aircraft's usage. In general, airframes depreciate based on the number of cycles—takeoffs and landings—to which they are subjected. The engines depreciate based on the number of hours of usage. In theory, maintenance could affect aircraft's real economic depreciation, but there is not much variation in airlines' maintenance procedures. The procedures are largely determined by law.

Because used aircraft prices decline very slowly, the economic depreciation is likely to be much slower than any policy any airline currently uses. So, all airlines' aircraft depreciation policies are conservative, at least in relatively good economic times. Some are more conservative than others. What is the management decision-making implication of this conservatism?

## **Question 2**

This question requires students to consider the benefits and costs of having, potentially, a third set of books. In theory, at least, keeping a set of books that better reflects the economic reality of the declining value of the aircraft assets should lead to better decision-making. Some companies have changed their depreciation policies exactly for this purpose, to better reflect the

value declines in fixed assets and, hence, to better match costs and revenues.<sup>1</sup> It is possible that a company's financial reporting strategy is not best served by a relatively accurate reflection of economic reality. Almost certainly a company's cash flow will be served by being conservative (rapid depreciation) in its tax records. So, in theory, at least, a company may be best served by maintaining three sets of books.

However, there is a cost of maintaining three sets of books. One cost is monetary. The charts of accounts and the processing systems must be established, and some transactions must be recorded three different ways. There is also a possible confusion cost, as not all employees will understand the differences in and the purposes for the three books of record.

### **Question 3**

This question was posed to force students to reach a conclusion as to what one single accounting policy choice might be best. They might usefully make observations about each of four sometimes-conflicting concerns—good economic decision-making, financial reporting effects, potentials for asset write-offs (if assets are depreciated too slowly), and potentials for gameplaying.

### **Pedagogy**

This case should only be used with students who have studied the mechanics of depreciation accounting. Generally, this is not a constraint because the depreciation topic seems to be included in every introductory financial accounting course.

Unless the instructor wishes to provide a tutorial on depreciation accounting or replacement cost depreciation, the discussion of this case can probably be completed in 50–60 minutes. One useful way to organize the discussion is to follow the order of the assignment questions.

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<sup>1</sup> For example, see L. Hall and J. Lambert, "Cummins Engine Changes Its Depreciation," *Management Accounting* (July 1996), pp. 30–36.

## **Las Ferreterías de México, S.A. de C.V.**

### **Teaching Note**

#### ***Purpose of Case***

This case was written to illustrate some of the basic problems with the return on investment (ROI) measure of performance. The problems arise in both the numerator (profit) and denominator (investment) of the ROI measures. The case provides sufficient detail to allow students to discuss both how to measure the basic elements of profits and investments and the behavioral implications of the use of these measures. Students should also consider alternatives to the use of ROI measures.

The case also allows for discussion of some other issues that managers face in the design and implementation of incentive systems. These include decisions about what employees to include in the plan, what target bonus to set for each type of employee included, whether to use a bonus pool feature, how to design the function linking performance measures and incentive awards, and how to set fair performance standards for all employees.

#### ***Suggested Assignment Questions***

1. Evaluate the proposed bonus plan that Mr. Gonzalez is considering.
2. How, if at all, would you modify the proposed plan?

#### ***Case Analysis***

##### **Background**

It is useful to start the discussion by clarifying some key facts. Ferreterías is a publicly held company. Its managers aspire to have the company be a Mexican equivalent of Home Depot or Lowe's.

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*Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Las Ferreterías de México, S.A. de C.V. case.*

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Ferreterías is not a small business. It operates 82 stores, organized into nine geographical regions. With most student groups, it is probably useful to clarify the key recurring decisions in the business, and then to identify who in the organizational hierarchy makes these decisions. Table TN-1 presents such a list:

**Table TN-1**  
**Key Recurring Decisions**

<b>Key recurring decisions</b>	<b>Person(s) responsible for making the decision</b>
Order right items in the right quantities	S
Staffing with right numbers of good people	S
Pricing	S
Granting credit	S (with corporate check on large decisions)
Selling	S, R (large contractors only)
Store location and design	C
Advertising	S
Control expenses	S

Key:

S = store

R = region

C = corporate

This table makes it obvious how important the store manager role is in the company. The store managers have considerable autonomy, so they play a key role in affecting the success of each store location.

### ***Old Incentive Plan***

Before this new proposal, performance-dependent incentives were not an important part of the Ferreterías management system. Bonuses were small (2–5%) of base salary, and they were based on the company's overall profits, so they were not controllable to any significant extent by any except the company's very top managers. Mr. Gonzalez also provided some subjective bonuses for exemplary performance.

These weak incentives seem to have caused some employees to become lazy and to be not focused on the aspects of performance important to the company's success. These problems are indicated in the quote that opens the case.

### ***New Incentive Plan***

A consulting firm designed the new incentive plan. A number of issues might be discussed. One is the decision to exclude all employees except the store, regional, and corporate managers. Clearly, the lower-level employees create value for the company, but the consulting

firm decided to exclude them with the reasoning that Ferreterías could not measure effectively the performances of these individuals. If prompted, some students will undoubtedly be able to suggest things that could have been done. For example, sales people could have been rewarded for bringing profits from new sales or for increasing sales from existing customers. Yard workers could have been rewarded for receiving positive customer feedback.

Another issue is the division of the bonus pool. Corporate managers are to be given, on average, 3% (15%/5 people) of the bonus pool. Regional managers get 1.67% each. Store managers get 0.85% each. In comparison, the corporate bonus awards seem too high, particularly given that the top two managers, the CEO and COO, are excluded from this plan.

A third issue is the function linking the measures with the bonus awards. There is a lower-level cutoff of 5%; no manager of a store earning an ROI of less than 5% earns any bonus. There is also an upper cutoff at 11%. As a consequence, six store managers earned no bonuses in that year, and 15 managers earned the maximum. Students should be asked to consider the behavioral implications of these cutoffs. The managers below the 5% cutoff and above the 11% cutoff will be motivated to incur all the worthwhile expenses they can in the current period and deferring all the revenues possible to the subsequent period because these shifts will have no effect on their bonus. Thus, a gameplaying environment is created.

A fourth issue is controllability. The performance standards are the same for all the stores, but their performance prospects are almost assuredly not equal. Some stores have better locations, and some probably have more efficient layouts. Ideally, performance standards should vary by individual location. This could be done through a formal budget negotiation process or more mechanically, such as by adjusting the goals for differences in local construction activity.

A related problem: are the six managers earning no bonuses really the worst managers? Maybe they are good managers who were transferred to poor performing stores and have not yet had a chance to turn around that performance? There is no provision for making allowances for this contingency. That may make it difficult for the company to induce good managers to move to poor-performing outlets. Ferreterías may want to distinguish the evaluation of the store location from the evaluation of the manager.

Finally, the logic of basing bonuses on a proportion of corporate profits can be questioned. The bonus pool feature does limit the company's exposure. This is a wealth-sharing feature of the plan. If the corporation does not do well, then payouts to employees are reduced. But corporate performance is essentially uncontrollable, even by managers at the store and regional levels, so this bonus pool feature just subjects these employees to uncontrollable risk. The yards do not seem to be greatly interdependent, so there is no need to have a "group reward" to motivate teamwork.

The focus of the discussion, though, should be on the technical aspects of the ROI calculation and the behavioral impacts of making ROI the central measurement in a bonus plan. The text reading provides a summary of some of the advantages and disadvantages of using ROI as a criterion for evaluating and rewarding managerial performance. Instructors can remind students of this list if that is deemed desirable.

### ***The Calculation of Profit***

The accounting treatment of revenues seems unfair in part. Stores are not given credit for sales orders written by personnel at regional or corporate levels, yet the store has to provide

the good for that sale. Thus, the stores incur the stocking and handling costs. Customer service on these sales may also suffer because the stores are not dealing with their own customers.

The stores are charged with all their local expenses, direct charges from regional and corporate headquarters, and allocations of all indirect costs. Some of even the **local expenses** may not be controllable by the store manager. The rental and depreciation amounts may result from decisions made by managers in the corporate office. The same arguments apply to the advertising material, catalogs, and other materials. Will managers have the opportunity to reject such material if they feel they can accomplish their objectives with less expensive advertising that doesn't conform to corporate policy or corporate image? Will that be allowed? Some of the **direct charges** may have a behavioral impact. For example, will charges for credit checks discourage their use? The case does not provide much information about the **allocations** of indirect expenses, but these raise some questions. Do the allocation bases have any economic meaning? And, why are the allocations of actual expenses not standard. This allocation method makes the yards bear the cost of any corporate budget overruns.

### ***The Calculation of Investment***

The calculation of investment similarly raises a number of measurement issues. Including month-end cash balances as investment will encourage managers to get rid of their cash at the end of the month. End-of-period gameplaying like this is commonly referred to as **window dressing**. What purpose is served by holding managers accountable for cash balances and what behavioral effects are produced should be of concern.

Likewise, including month-end inventory at cost creates an opportunity for managers to manipulate their inventories in such a way that their investment is reduced. The effect of such reductions, however, will inevitably be on the level of service they can provide to customers. Ferreterías' system does not enable the calculation of a cost of stock-outs.

Month-end receivables also provide opportunities for discretionary action by yard managers in allowing credit, or by different managers adopting different policies and hence encouraging consumers and customers to deal with one yard as opposed to another simply because of their credit policies.

Most students will quickly recognize the arguments against including investment in automobiles, trucks, equipment, furniture and fixtures at their depreciated (net book value) cost. To illustrate the point, instructors can draw a figure showing that ROI of any entity being evaluated in terms of the return on the net book value of assets will increase over time, just with the passing of time. Use of net book value can have some perverse behavioral effects. It can cause managers to delay replacing assets and to operate with older, less efficient or less attractive, equipment and facilities. In the event extra equipment is available, yard managers might have a tendency to dispose of the newer rather than the older equipment because of the effect it will have on the investment base. Using net book value also causes problems in comparing performance across yards because the yards' assets are of different ages. A related issue—leases at Ferreterías are not capitalized.

### ***Implementation Issues***

While little information is given about the process by which the plan has been developed, students can infer that the managers who will be greatly affected by the plan seem to

have had little or no input into the design. At the end of the case, Mr. Gonzalez is lamenting that he will have to be the one to announce the implementation of the plan. This lack of participation can be costly both because the expertise of the people at the operating levels was not tapped and because participation itself reduces resistance to implementation.

## ***Pedagogy***

This teaching note has been written in roughly the order in which we suggest discussing the issues. At the start of class, it is desirable to clarify both what is important for Ferreterías and who in the organization is responsible for the various key decisions.

Before evaluating the new plan, it is useful to clarify the key elements of the plan. We like to have the students describe the plan along many of the common plan dimensions, including the form of the awards (here cash), performance measures, degree of discretion allowed in making the awards, the shape of the results/reward function, the size and frequency of the awards, the degree of uniformity of awards throughout the organization, and the source of the funding (bonus pool).

Then, students can be asked to evaluate the new plan and to suggest possible improvements. Instructors should focus on the behavioral impacts of the plan and other plan alternatives. It is the induced behavior of the employees in the company that will produce value, or not.



## Industrial Electronics, Inc.

### Teaching Note

#### *Purpose of Case*

This case, which is really a short vignette, was written primarily for exam purposes in situations where the examination time is short. But the case can also be used as the basis for a class discussion.

The case raises a number of issues, including performance measurement, performance standards, functions linking performance with incentive awards, and the behavioral responses by managers and employees to incentives.

#### *Suggested Assignment Questions*

Here are the questions used in the exam setting (importance weightings assigned to each question are shown in parentheses):

- (20%) 1. Calculate the bonus award (as a percent of base salary) that would be given to the manager of each of the following four divisions under the proposed new bonus system. These divisions are representative of the range of divisions within IE.

(\$000)

Division	Budgeted Operating Profit	Budgeted Operating Assets	Actual Operating Profit	Actual Operating Assets
A	\$1,000	\$8,000	\$1,150	\$7,000
B	1,000	8,000	4,500	\$7,000
C	50	1,000	300	800
D	(700)	4,000	(300)	4,200
E	600	2,000	100	1,800

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Industrial Electronics, Inc. case.*

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- (20%) 2. Evaluate (i.e., discuss the pros and cons of) the current bonus system.
- (30%) 3. Evaluate the proposed bonus system.
- (30%) 4. Propose a bonus system that you believe is optimal for IE. Why do you think your proposed system is optimal? Explain.

### **Discussion**

The case starts by describing an ineffective incentive system. The old system was replaced by a new system that is quite different, but still not without problems.

#### **Question 1**

Question 1 forces the students to apply the description of the new system to a hypothetical situation. The purpose is to help them understand a key detail in the new system. Most students have no problem solving Question 1. The bonus awards (as a percent of base salary) in Divisions A through E, respectively, are 63.5%, 150%, 63.7%, 68.8%, and 26.2%.

#### **Question 2**

Question two asks for an evaluation of the current (old) bonus system. This system provided managers with bonuses based on a share of overall corporate profit after taxes in excess of 12% of book net worth.

Advantages of the current system

1. It is a wealth-sharing system. If the company does well, all managers do well, and vice versa. The company has to make larger payouts when it is best able to do so.
2. The system might encourage teamwork because everyone is rewarded on the same measure of group performance.
3. The performance targets are fixed and timeless. Thus, there are no politics in the negotiation of performance targets.
4. The system is easily understandable.

Disadvantages of the current system

1. Except for the highest level of managers, corporate performance is largely uncontrollable. Division managers' bonus awards are little affected if their division has an outstanding or a poor year.
2. The timeless goal (12%) does not reflect the economic situation or changes in the situation.
3. Profit after tax is not a good reflection of value creation.
4. There is no charge for the use of assets that are financed by debt, in the sense that the asset and the debt net to zero in the effect on book net worth. Of course, interest expense on the debt would have to be paid.

5. The bonus cutoffs, both at the bottom (corporate performance below 12%) and the top (maximum bonus of 150% of salary), are potentially bad:
  - a. The current situation, in which corporate performance is below the minimum performance level, has discouraged some of the managers. This discouragement could lead to demotivation and turnover.
  - b. There are performance regions where there is no link between performance and bonus awards. This can adversely affect motivation. The cutoffs also provide motivations for gamesmanship (i.e., moving income and assets between performance periods).

### Question 3

Question 3 asks for an evaluation of the proposed new system.

Advantages of the proposed new system

1. The measures are more controllable. Division managers will be held accountable for division results; group managers for group results; and corporate managers for corporate results.
2. The awards are based on an economic profit, or residual income, performance measure. Managers would be charged for tying up assets in their business.
3. The type of financing used to acquire the assets would not affect the measure.
4. The performance targets would be tailored to each business unit. Presumably they would be more realistic and more equitable and would engender greater commitment from each of the managers.

Disadvantages of the proposed new system

1. The performance measures, which are accounting-based, are short-term oriented. This could be particularly costly in a high-technology business where innovation is a critical success factor. Short-term accounting measures discourage research and development-related investments.
2. The measures are just uniform, summary results indicators. They are not at all linked with strategy, and they provide no operating guidance for managers as to how to accomplish the results.
3. Cash is arbitrarily assigned to the operating units. Why?
4. Charging for fixed assets based on net book values causes well-known problems. Among other things, returns go up just with the passage of time and, hence, NBV-related measures motivate managers not to replace older, more depreciated assets.
5. There seem to be no adjustments made based on whether the company leases or owns fixed assets.
6. The cost of capital does not vary across operating units, and it seems not to change over time, such as with interest rate changes.

7. Bonuses can be paid even if the company or division is losing money. Is this fair to the shareholders?
8. There is still a maximum bonus cutoff of 150% of salary—see Example Division B—which could cause demotivation and gamesmanship.
9. There is a scalability problem that may be perceived by some managers to be unfair. That is, the bonus earned on, say, each \$100k of economic profit is different across divisions.
10. Budget targets are difficult to set equitably in uncertain environments such as IE operates in.
11. The system provides room for gamesmanship (e.g., window dressing, creation of budget slack).
12. Under the new system, bonuses will probably be paid even when an operating unit is not making its profit target (see example Division E). Is this desirable, particularly when the targets are set to be highly achievable?
13. Organizational interdependency seems to be small, but to the extent that divisions have to cooperate, there is a chance here of suboptimization. The division-level performance measures reward solely division performance.
14. Is the new plan too complex? Will the affected managers understand it?

#### **Question 4**

Question 4 asks for student recommendations. In answering Question 4, students must try to address as many of the weaknesses of the new system as they can while retaining the advantages. They must also consider the costs of their suggestions, as well as the benefits. There is no perfect solution here. The purpose of the exercise is to expose students to some issues firms commonly face and to get them thinking about various alternatives, and their costs and benefits.

#### ***Pedagogy***

This is a short case. However, because it contains descriptions of two incentive plans and raises so many issues, the discussion of it can easily consume an entire class period, of 75 minutes or even more. Following the ordering of the student assignment questions provides a logical way to develop the material. However, completing the discussion of the old system (Question 2) might usefully be done before starting the discussion of the new system (Questions 1 and 3).

## Haengbok Bancorp

### Teaching Note

#### *Purpose of Case*

The Haengbok Bancorp case raises the issue as to whether the activities of bank lending officers should be monitored and motivated using a results control system built around a profit measure of performance. This issue is timely given that many of the major problems faced in the financial services industry in 2008–09 were blamed on incentive problems. This case contrasts nicely with many of the other cases in the book, which lead students to believe that allowing high autonomy but motivating performance with lucrative performance-dependent rewards is a generally preferred alternative, at least at higher organization levels. The answer here is not so clear.

The case also fulfills two other objectives. It was written in response to some instructors' requests for more short cases. The case has also been used effectively as an exam case using the assignment questions suggested below. Exam questions that are more directive can also be used.

This situation is real but heavily disguised.

#### *Suggested Assignment Questions*

1. Evaluate Haengbok Bancorp's system of controlling the behaviors of the account managers in the New York branch. What changes would you suggest be made, if any? Explain. In your answer, comment specifically on the merits and demerits of the control philosophy and each of the significant individual control system elements, such as the use of mini profit centers and the associated performance measures and incentives.
2. Discuss the FETC loan application situation and the effects that outcome might have on the account managers' behaviors and performances? Does this example illustrate a problem that needs to be fixed? If not, why not? If so, how would you fix it? Explain.

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## Case Analysis

Here are some major questions that can be raised in class:

1. What makes a good account manager?

This is somewhat spelled out in the case. Account managers must find their best prospective clients, solicit their business, structure the deals (term, pricing, covenants), prepare the loan applications, and convince the various parties in Haengbok (e.g., credit committee) of the worth of those applications because they had to approve the funding of the loans.

Since the branch was new and there were so many potential clients, time management was key. The account managers had to consider both the benefits (loan size, term, lending spread) and the costs (find, analyze, prepare application, risk of non-funding) of all their client search activities.

2. What are the alternatives for controlling the activities of the account managers?

All of the major types of controls discussed in the book could be, and are to some extent, used by Haengbok. Mr. Kim hired experienced account managers who had track records of success in their careers. This is an important form of personnel control. The requirements for preparation of loan applications and then approvals by either Mr. Kim and/or a credit committee are important forms of action controls (pre-action review). Reporting performance by account managers is a form of results control.

3. Did Jae Lee do a good job with the FETC loan application?

Students will argue both sides of this question. In defense of Jae, he found a client that appears to fit the branch's mission. He apparently worked effectively with the client and got the application submitted. All indications are that the application was well prepared. The New York branch committee approved the loan. The deal would have been booked if the Corporate Credit Committee had approved it. The loan probably would have generated significant profits for Haengbok. Maybe the corporate Credit Committee was wrong and Jae was right.

On the other hand, the final outcome was negative for the bank. Jae caused the bank to incur significant expenses for no benefit. Should he be faulted for the negative outcome? Perhaps he should have known about the client's potential tax risks and considered whether he wanted to have the bank do business with a client engaged in such activities. Perhaps he should have lobbied more effectively with the Committee that the client was worthy of the loan even in the face of the allegations. Maybe he should have gone to Seoul to plead the case in person, rather than just participating in a conference call. In the end, the Seoul Credit Committee decided that FETC was not worthy of a loan, so the outcome was poor.

4. Is the bank's control system effective?

On the positive side:

- It appears to protect the bank from making bad loans because there are multiple levels of reviews. The controls are tighter with larger loan applications.
- It allows the account managers to use their own personal operating styles that, presumably, play into their individual strengths. They can be as creative as they wish.

- It should foster a sense of teamwork. The account managers should be willing to help each other, assuming they have different strengths (and they do).
- It is relatively inexpensive. The experienced account managers do not need a lot of training. There is not a lot of control infrastructure, except the application procedures and committee meetings.

On the negative side:

- It is pretty loose.
  - There is not much direction given to the account managers. They are told to “book good deals,” but apparently what makes a good deal good is not well communicated.
  - There is not much assurance that the account managers are working effectively. Mr. Kim cannot supervise them closely because they are physically located across the country.
  - The reviews cause delays in the funding of the loans.
  - The need for reviews might cause account managers to create small loan applications.
- Are the hiring controls reliable? They will probably get less so as the branch grows in size.

5. Is the idea of setting up the account managers as “mini profit centers” a good one?

This is the core issue in the case. Is profit a good performance measure in the banking industry? Almost assuredly the answer to this question is no. There are measurement problems:

- Profit is not assured until the principal is paid back. The riskier the loan, the higher the profits look in the early periods, but the higher the potential that some portion of the principal will have to be written off.
- Volume is easy to measure, but by itself is not meaningful. The other important aspects of the deal—loan quality and risk—are difficult to measure.
- All the loans suffer from some degree of uncontrollability. Even loans that look good at the time of booking might have to be written off as the borrower’s fortunes change.

Jae, himself, was uncomfortable with the idea of being evaluated in profit center terms:

“I view myself as a professional banker, and I really don’t want to be measured in terms of how many assets I put on the books or how much profit I make in one year. I think the profit measures can be very misleading. For example, I may have put my time into developing something that will show up next year. Or I may have made some poor judgments and have something on the books that is going to cause a big loss next year. In fact, it may be 10 years by the time you can tell how much profit I made for the bank, as then you can look back and see if all the money was collected.”

6. What are the alternatives?

A. Personnel controls

- Hire experienced account managers

- Assign them to their areas of specialty
- Provide continuing education

B. Action controls

- Direct supervision. Easy to do when the branch is small
- Activity reports
- Approval limits/pre-action reviews

C. Results controls

- Set targets for volume of loans and achievement of other objectives?

7. What will the control system look like in 10 years, say, assuming the branch is significantly larger?

When the branch becomes larger, it will be more difficult for Mr. Kim, or the branch manager at that time, to know all that is going on in the branch and, hence, to provide direct supervision. Formal procedures or reports of actions taken will probably have to become more important. The major caution must be to avoid implementing procedures that are so rigid that they make it impossible for the account managers to exercise their individualism and creativity. Should results controls be a significant part of the branch's system of controls over the account managers? Maybe not, because the accounting performance measures do not provide good (congruent and timely) indications as to whether the account managers have done their jobs well.

### ***Pedagogy***

This is not a difficult case. Most students understand at least intuitively what the account manager job is. It is relatively easy to get them to express their opinions in class.

There are different ways to organize a class discussion of this case. One alternative is to follow the order of the questions discussed above. That is, clarify the major elements of the accounting manager role, discuss the alternatives for controlling the account manager behaviors, and then critique the choice that Mr. Kim has made for the New York branch of Haengbok. This approach is effectively triggered with the question: "What makes a good account manager?"

A second alternative is to start with an evaluation of Jae Lee's efforts to fund a loan for FETC. Most students will conclude that Jae did good work here, but perhaps he just got unlucky. Then the discussion can work backwards. If Jae's effort was good but the outcome was bad for the bank—monies were spent to no avail—then perhaps the results do not provide a good indication as to whether good actions were taken. What should the branch managers do instead?





**University of Southern California**

**Marshall School of Business**

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## **Corbridge Industries, Inc.**

### **Teaching Note**

#### ***Purpose of Case***

The Corbridge Industries, Inc. case raises the basic managerial issue as to what financial measure(s) should be used for evaluating business unit plans and accomplishments. The case describes a company that is questioning the meaningfulness of the traditional accounting measures of performance (e.g., net income, return on investment). Company managers are in the early stages of considering whether or not a shareholder value model, which incorporates discounted cash flow principles, can be used to construct a better measure of performance. Thus, the case is useful for motivating a discussion of how to evaluate these two (and other) performance measures.

#### ***Suggested Assignment Questions***

The following questions have been successful in guiding student preparation and class discussion:

1. Should Corbridge use “impact on shareholder value” as the primary financial criterion on which to evaluate:
  - a) business unit plans;
  - b) managerial accomplishments?
2. If not, what criterion (or criteria) should be considered for each purpose? Should impact on shareholder value be considered at all?
3. If the impact on shareholder value criterion is used, how should the issues raised in the case be resolved?

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## The Evaluation-of-Plans Question

In the beginning of class, it is necessary to discuss whether the criterion “impact on shareholder value” is useful in evaluating business unit plans. MBA students have net present value models for evaluating capital expenditure proposals fresh in their minds, so most of them have no objections to the use of this criterion. But, some students will rightly bring up their conclusion that corporations should also have other goals, such as sustainability and other forms of corporate social responsibility. There are good and bad ways of creating shareholder value. This is a useful discussion to have, but in my management control classes I try not to spend a lot of time on it. I just want to get the students to agree that long-term value creation is one useful criterion, and I try to move on.

## The Measurement-of-Performance Question

While the planning issue is an important one which can be discussed at length, the case was actually written to raise the related performance measurement question: What should be used as the standard for judging managerial accomplishments? Two competing options are described in the case—accounting and shareholder value measures of performance. I try to focus the class discussion on the relative advantages and disadvantages of each.

If it is not clear from prior classes, I like to start the discussion by reminding students how important this measurement issue is. At managerial levels in firms above minimal size, “results accountability” is the dominant form of control. Managers are generally allowed considerable autonomy but are held accountable for achieving certain results. Results accountability control requires: (1) defining the performance dimensions on which results are desired (e.g., profits, growth); (2) measuring performance on these dimensions; and (3) providing rewards (e.g., bonuses, promotions) to encourage the behaviors that will lead to the results desired. The measures direct the managers’ activities. If the wrong measures are chosen, the managers will do the wrong things. It’s about as simple as that.

The students’ task in this class is to compare the accounting and shareholder-value alternatives. It is possible to get right into the comparison, but I think it is useful to start by agreeing on a set of criteria to use for the comparison. I have tried having the students develop their own set of evaluation criteria, but that was a time-consuming process. Now I rely on the set criteria that are discussed in Chapter 2 (and again in Chapter 10) of the text: congruence, controllability, precision, objectivity, timeliness, and cost efficiency.

**Congruence.** There is no question that shareholder value measures of performance are superior to accounting measures in terms of the congruence criterion. The goal of a profit-making corporation profit is not to maximize profits; it is to maximize shareholder value. If the primary financial goal of business firms is maximization of shareholder value, then measures of success should reflect changes in shareholder value. Any other measure is just a surrogate, and there is considerable evidence that accounting measures of performance are very crude surrogates.<sup>1</sup> The reasons for this and some of the evidence are presented in Chapter 10 of the text.

Exhibit 3 and 4 of the case show specific examples of situations in which accounting measures of performance can be misleading, and it is important to make sure the students understand how these situations can arise. Exhibit 3 shows an example of a good investment

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<sup>1</sup> For a summary of much of the evidence, see B. Lev and F. Gu. 2016. *The End of Accounting* (Hoboken, NJ: Wiley).

that does not look good in accounting terms. Such a situation occurs where an expenditure is expensed immediately or depreciated (amortized) more rapidly than the revenues generated from the expenditure or where the payoff (in accounting terms) toward the end of (or after) the planning horizon. Exhibit 4 shows how a bad investment can look good in accounting terms in the short run. This can occur where revenues appear early but significant expenses are required after the end of the planning horizon.

The insight I want the students to reach is as follows. It is shareholder value that we want managers to increase. When we observe only that managers have increased accounting income, we cannot be sure that they have increased shareholder value. Thus, accounting measures of performance are limited in their use as a measure of success or, in other words, the “congruence” of accounting measures of performance is to be questioned.

**Controllability.** Controllability is not an issue in this comparison. Generally, managers can have significant effects on both creation of shareholder value and accounting income and returns.

**Precision.** Although shareholder value measures of performance are superior in terms of congruence, this fact does not necessarily lead to the conclusion that all firms should implement them because such measures do not rate highly in terms of all the other criteria. Precision is one of the criteria on which shareholder value measures rate poorly.

Precision refers to the accuracy with which a given quantity can be measured. For precision to be high, the dispersion placed on a given quantity by multiple, unbiased measurers would be small. If measures are imprecise, neither managers nor subordinates will place much confidence in them, and where imprecise measures are used for evaluation purposes, managers run a high risk of misevaluating performance. The effect will inevitably be negative reactions from those being evaluated as they will see that, for example, equally good performances are rated differently.

The accounting measures of performance are clearly more precise than are the shareholder value measures. Accounting measures of performance focus primarily on transactions that have already taken place, and many measurement rules exist to limit the degree of discretion that can be applied to any economic event. Some imprecision is still present with accounting measures of performance as, for example, estimates must be made as to the collectability of receivables and salability of inventory, but accounting precision is certainly high relative to that of shareholder value measures of performance. Forecasts of future cash flows and risk are subject to many different assumptions, such as to economic conditions, competitor actions, and the realizations of company successes, so the precision of shareholder value measures of performance is low.

**Objectivity.** Objectivity means freedom from personal bias. Here again, accounting measures of performance have an advantage. The accounting rules sharply limit the number of areas in which managers can impart biases to the numbers, which they tend to do usually in an optimistic direction. And where biases could exist, rigorous objectivity checks, done by experienced external and internal auditors limit the impact of the biases.

Shareholder value measures of performance are subject to considerable biases, as managers are likely to be very optimistic about future prospects, particularly if the amount of capital their entity is allocated or their compensation is affected by such optimism. To some extent upper management can provide a check on estimates of entity cash flow potentials, as they do now in evaluating expenditure proposals, but these checks are limited in effectiveness

where lower-level managers have better information as to their own entities' prospects (as they should have in a decentralized organization).

**Timeliness.** Timeliness is not an issue in this comparison. Both measures are available on a timely basis.

**Understandability.** Understandability is a possible issue. Some students will argue that the shareholder value measures of performance are not easily understandable by line managers. If this is true, behavior will not be affected positively, and confusion and frustration will probably be inevitable.

Whether or not understandability is a problem depends on the managers, I think. Shareholder value measures are based on net present value principles, and well-trained, professional managers should already be familiar with them. The same is not true, of course, of less-highly trained managers.

**Cost Efficiency.** For publicly traded entities, costs are not a major concern in this comparison. All organizations produce accounting measures for financial reporting purposes, and the incremental cost of using them for internal management purposes is near zero. Similarly, for these entities, market valuations are easily and cheaply obtainable. Costs do become a concern for privately owned organizations and shareholder values and changes in those values might be obtainable only through an expensive appraisal process.

Despite the definite advantages of the shareholder value measures in terms of congruence, it is not clear that Corbridge should implement such measures for control purposes. Such measures have precision and objectivity problems that can be very serious, particularly if the measures are used for allocating capital and compensation. Understandability could also be a problem for some managers.

### **Issues related to shareholder value measures**

As is discussed at the end of the case, Corbridge managers have not fully developed their thinking about how the shareholder value measures might be implemented. There are a number of unresolved issues, and it is useful to discuss these in class.

One issue is whether the planning horizon should be extended. The company's present practice is to assume that the operating cash flows in the last year of the three-year plan will remain constant in perpetuity. This short horizon puts a lot of weight on the third year of the plan. This procedure might be adequate for some entities, such as those that operate in relatively stable markets, those that have many sales transactions in a given period, and those that have relatively short product development cycles. But a short horizon is not adequate for entities that are expecting significant growth (cash flows are projected as flat after year 3), or those that will not derive the bulk of the incoming cash flows from their current investments within the three-year time period, perhaps because they are investing in large amounts of fixed assets. In order to provide better measures of the values and changes in values of these entities, it would seem to be necessary that the company extend its planning horizon, perhaps to five or seven years, or at least incorporate an assumption about a growth rate for projecting the cash flows out past the three-year horizon.

A second issue is whether plans should reflect a single point or some form of probability distribution. While the case can be made for considering probability distributions, it would probably be a very difficult idea to implement because most managers are not

experienced at estimating full distributions. Thus, it is probably best to leave this idea alone, at least in the short term.

A third issue is how to include risk in the shareholder value model. This issue has been discussed extensively in the finance literature. The options are as follows:

1. Use the same discount rate for all entities.
2. Estimate a risk factor based on the stock market betas of the closest competitors. This may be practicable if some pure-play competitors exist.
3. Estimate a risk factor from some measures that are available, such as volatility in sales or earnings. This procedure is limited in that the historical ratios on which these indicators are based may not be valid in the future time periods being considered.
4. Estimate future risk subjectively using all of the above indicators. The disadvantage of this procedure is that it would probably be very difficult to explain such estimates to the managers, whose entities were being evaluated.

Option 2 is the theoretically correct choice, but the beta concept of risk may be difficult to explain to some managers, and pure-play competitors do not exist in many situations. The company is probably best advised to start with option 1, even though it is an inferior solution that will cause an overvaluation of risky entities and an undervaluation of less risky entities, and to experiment with the other options. Then they can experiment with options 2, 3, and 4 and decide over time if it is practical to try to make the model more accurate.

The fourth and fifth issues are how fast to involve managers in the process of developing and evaluating the shareholder value measures, and whether or not to link such measures to tangible organizational rewards. There is not enough information in the case to say much about these issues, but as they would involve quite a substantial change in the way managers think, it is likely that progress would have to be made relatively slowly.

### **Other Measurement Alternatives**

As neither accounting nor shareholder value measures of performance satisfy all the measurement criteria, it is useful to get the class to think about what else might be done. Here are some possibilities:

- **Choose better accounting rules.** There is no reason why the rules used for financial reporting have to be used for internal (control) purposes. Perhaps the company could improve congruence by capitalizing R&D, training, and advertising and sales promotion expenditures, or by implementing some form of inflation accounting. Many companies, particularly those in high tech industries, are now using “pro-forma” earnings measures with different measurement rules that are not consistent with GAAP. Instructors could go down this tangent if they wish.
- **Lengthen the measurement period.** Accounting numbers are most limited in assessing performance in short periods of time. Annual and even biannual net income numbers may not be very meaningful; it depends on characteristics of the entity (e.g., length of the production cycle, capital intensity). So perhaps rewards should be provided only for performance that is measured over a three-year (or longer) period. Over longer

measurement windows, the correlation between accounting earnings measures and shareholder value changes is higher.

- ***Use non-financial measures of performance.*** It might be possible to choose some non-financial indicators, such as market share, number of patents granted, or number of new customers, that provide better indications of success than do accounting numbers or shareholder value numbers. Indeed, this was one of the primary motivations for the invention of the balanced scorecard concept, and other similar approaches.

All of these options have some advantages and disadvantages.

### **The Bottom Line**

I have found that the discussion of this case varies significantly depending on what has taken place in the preceding classes. When I used this case directly after a series of cases which focused on accounting measurement issues, the students were nearly unanimously against the shareholder value measurement concept. But when I used the case to wrap-up a section of the course on shareholder value measures of performance, a plurality of students thought Corbridge should go ahead with plans to expand the use of the value model. This suggests to me that while the idea of shareholder value measures of performance is seen as radical, continued reflection about the issue leads some to conclude that it has some advantages that can be exploited.



**University of Southern California**

**Marshall School of Business**

Leventhal School of Accounting

## **King Engineering Group, Inc.**

### **Teaching Note**

#### ***Purpose of Case***

The King Engineering Group, Inc. case describes the key elements of the company's financial results control system. One unique feature in this system is the attempt to develop a definite link between the value of this privately held company and the goals and measures of the various operating units. King is owned by an employee stock option plan (ESOP).

The case provides secondary learning opportunities regarding ESOPs and management of a large-scale-project construction and engineering company.

#### ***Suggested Assignment Questions***

1. How can privately-owned corporations assess the extent to which they are creating shareholder value? Is King's approach to this problem the right one to use?
2. Evaluate King's target-setting processes, paying particular attention to:
  - a. the approach taken to set financial performance targets (assuming that King's estimates of share price are reasonably accurate); and,
  - b. the process of developing business unit targets that are consistent with the corporate targets;
3. Evaluate King's incentive systems. What changes should be made, if any?
4. How should the concerns mentioned at the end of the case be addressed, if at all?

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Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid for instructors using the *King Engineering Group, Inc.* case.

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## Case Analysis

### Question 1

Privately held corporations have several options for assessing the value of the corporation at any given point in time and, hence, the value created in any given time period. One option is the one taken by King—an appraisal by an independent outside party. Appraisers use a variety of methods to determine the value of economic assets. Here the primary approach seems to have been to compare some of King's financial performance measures (revenues, EBIT, and EBITDA) with those of its closest public-traded competitors and apply comparable multiples. Although the appraisals are expensive, this is probably the best that can be done here. Company insiders could use any or all of the same methods used by the outside appraisers, but they would suffer from a lack of independence, which would lead to a real, or at least perceived, lack of objectivity.

It should be noted, though, that the appraisal numbers will have an error component in them if King's project portfolio or expenses below the EBIT line on the income statement vary significantly from those of the companies to which it is being compared. The lack of product portfolio comparability is mentioned toward the end of the case. In particular, some of the comparison companies are heavily dependent on oil infrastructure-related projects, and some are not. The fluctuations in oil prices make the oil-related projects more volatile and risky.

### Question 2

King uses several steps in developing its corporate financial performance targets. First, they set an annual share price increase goal which, in recent years, has been 15%. Arguments are given in the case as to why this is not set higher. The main argument given is a constraint on hiring good people. King managers also value steady, sustainable growth rates.

Second, they have to translate the share price growth goals into financial performance targets. This (Exhibit 2) is the most innovative part of the King management system. It is a thoughtful approach, but students should recognize that it is based on two critical assumptions. One is regarding the accuracy of the share price (to four significant digits?), but in Assignment Question 2 that concern is waived (i.e., "assuming that ..."). The other major assumption is in the accuracy of the price/earnings multiple, which is derived from the comparisons with the right public-traded corporations in the industry. Presumably, judgment is applied to make this assumption as accurate as possible. The real accuracy is not observable.

The translation process is completed by working from the Target NOI derived from share price growth up the income statement, using some historical ratios, which hopefully do not change much, to GPP and GPS targets.

The rest of the target-setting process is fairly typical. Instructors can point out some of the elements, including:

- The use of bottom-up planning and the almost inevitable "sandbagging";
- The use of "probability-factored" estimates of projects that are being forecast;
- A start with a baseline projection and then the addition of two levels of incremental investment, if appropriate;



- The need for some business units to “step up” to higher targets if the consolidation of the business unit plans falls materially short of the corporate target;
- The use of corporate planning reserves to help ensure that the corporation achieved its targets, even if some of the business units did not.

The system element that offers “free money” if worthwhile investments are proposed appears unique. For investments that have to be expensed immediately, like R&D, this offer is rare, if not totally unique, and it certainly should stimulate some investment. It is a creative approach to the solution of the common myopia (short-sightedness) problem.

However, if the investments made are to be capitalized, then this approach is not so unique. The behavioral effects should be about the same as seen in other companies. Capital projects involve relatively low amounts of expense that hit the income statement in short time periods.

Regardless of the accounting treatment, it is natural to expect higher returns in the future from the business units that have made the investments.

### **Question 3**

The incentive systems look fairly traditional, but both of the plans and each of their elements are worthy of discussion.

Regarding the annual incentive plan (MIP):

- The case describes changes in the key performance measures used in the MIP over the years and the reasons for those changes. By 2016, King has settled on two key measures—GPS and NOI.
- The targets were set to be achievable. The threshold might be seen as 100% achievable with effort. This is consistent with the practices of most other companies.
- The amount of subjectivity allowed in the assignment of incentives was increased, to 30% of the total in some situations. A discussion of the advantages and disadvantages of subjectivity in performance evaluations can easily be motivated from the examples presented in the case. It is also noted in the case that the subjective awards tend to be highly correlated with the objective performance measures.
- Bonuses were based on performance measures at the manager’s organization level (i.e., corporate, group, business unit), but no bonuses were paid if the corporation failed to achieve its NOI goal.
- Group managers were charged with the significant task of translating the group goals to appropriate business unit goals. This can be a significant, and controversial, task.
- The reward/performance function is shown in Exhibit 3 of the case. The threshold level of performance is set at 90% of target. The rewards for exceeding target are modest because King values sustainable growth. However, one manager notes in the case that subjective awards can be given for performance significantly above target.

Regarding the long-term incentive plan (LTIP):

- The performance cycle was three years, with overlapping cycles.
- The key performance measure was share price growth.
- At the time of the case, no payments had yet been made because the plan was so new.
- The plan was designed primarily for wealth-sharing and employee retention purposes.

#### **Question 4**

Several of the concerns should have been discussed earlier in the class when the elements of the system were being focused on.

The second concern mentioned by Jim Anderson, about the difference goals of employees of different ages, is somewhat unique to an ESOP company. In a large, publicly owned company, presumably the shareholders buy shares in the companies whose performances match their risk profile. ESOP companies, though, are run for the benefit of the employees, and those employees have different time horizons and different risk preferences. This is an unavoidable problem. Probably, the best the company can do is a compromise. But, it should be noted, this problem is faced by many privately held organizations, such as when an older owner or partner is near retirement and power is being transitioned to younger leaders.

The concern that King needs a return measure, like ROA, is an interesting one. The share-price calculations are all based on multiples of earnings (e.g., NOI, EBIT) or revenue measures. Returns measures assess the efficiency of the deployment of assets. Higher asset efficiency would lead to higher NOI and, hence, share price, but the returns themselves are not measured in King's system. Some return measure could be a useful addition to King's system of measures, for monitoring purposes if not directly for incentive purposes. But quotes at the end of the case note, correctly, that financial assets are not King's most important asset; people and intellectual property are. Accountants are not good at accounting for human and intangible assets. Human resource accounting, for example, about which much was written in the 1970s, never got any traction.

The end of the final quote notes a need for a focus on non-financial measures. This is undoubtedly correct. But which ones, and how should they be weighted?

#### **Pedagogy**

This case offers instructors many options for class discussion. It would seem that the two unique elements of King's system—the translation of share price growth targets to financial performance targets and the offer of “free money” for worthwhile investments—should be discussed.

After that, instructors can pick and choose the topics that best fit their courses. This case can be taught as a planning and budgeting case, with the complication of the company being in a large-scale project management environment, or an incentive design case. King's incentive plans are fairly traditional. The case can also be used to expose students to management in an ESOP company. ESOPs are an increasingly important form of ownership in the United States, but also elsewhere, like the poster child John Lewis Partnership (JLP) in the United Kingdom.

Whereas the focus in King's is mostly on the financial *results control* and company valuation consequences of employee ownership, students could be motivated to comment on whether and how employee ownership affects employee behaviors, attitudes, engagement and commitment more generally, which in our book's terminology is a form of *personnel/cultural control*. The JLP example of employee ownership in the U.K. is much touted in this regard.

## Berkshire Industries PLC

### Teaching Note

#### *Purpose of Case*

The Berkshire Industries PLC case was written to illustrate the use of “economic profit” in a performance measurement system. Consulting firms have developed various measures of economic profit; EVA™, developed by Stern Stewart & Co. is probably the best known. All of these economic profit measures are modified versions of the concept that accountants have traditionally called “residual income.” In this case, students are asked to evaluate an economic profit measure that involves two common measurement adjustments, capitalization and amortization of advertising expenses and the elimination of goodwill amortization.

The case also raises some related results control system issues. The system proposed in the case includes automatic ratcheting of performance targets, a results/reward function without thresholds and caps, and a “bonus bank” that smoothes out the bonus awards. Each of these system elements can be evaluated. Students must also consider some implementation issues.

#### *Suggested Assignment Questions*

1. Were Berkshire’s motivations for a new incentive system reasonable? If so, what were their main options for a new system? Was an economic profit-focused system a reasonable choice?
2. Use the data pertaining to the Snack Food Division, as shown in Exhibit TN-1, to calculate:
  - a. The economic profit for the division for 2000 and 2001.
  - b. The economic profit target for the division for 2001.
  - c. The division manager’s bonus payout (% of salary) for 2000 and 2001. (Assume that the slope of the payoff line for 2000 was arbitrarily set by the Berkshire management to equal 1.0.)

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*Professors Kenneth A. Merchant and Wim A. Van der Stede and research assistant Xiaoling (Clara) Chen wrote this teaching note as an aid for instructors using the Berkshire Industries PLC case.*

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3. Assume the base salary of the manager of the Snack Foods Division was £120,000 in both 2000 and 2001. How much *cash* would the manager receive from his bonus payouts in 2000 and 2001?
4. Evaluate Berkshire Industries' new incentive plan. What changes would you recommend, if any?
5. Should Mr. Embleton make special adjustments of the economic profit figures or the bonus payouts for personnel in the Spirits Division in 2000 and 2001? Why or why not?

### **Case Analysis**

The company's motivation for a new incentive system arises from two concerns. First, the board was concerned that Berkshire managers' interests were not aligned with those of shareowners. The board members were particularly concerned that EPS was not a good measure since growth in EPS did not translate into stock price appreciation.

Second, the board wanted to introduce more objectivity into the performance evaluation and reward system. Some board members believed that too much subjectivity in the reward system results in a weak correlation between bonus awards and actual operating performance. Furthermore, the subjective part of the bonus system caused managers to spend more time negotiating their bonus rather than worrying about generating profit.

In general, the benefits of an economic profit-type system include the following:

- It introduces balance sheet accountability to managers, some of whom are accustomed to thinking only about income figures.
- It aligns managers' actions with shareowner values by encouraging managers to invest only in projects that generate a return greater than the cost of capital.

An economic profit system is not the only alternative for holding managers accountable for capital usage. Other bottom-line, summary performance measures, such as ROI, RONA, ROE, and ROC, can be used for that purpose, so can any of many combination-of-measures systems, such as those focused on "key performance indicators," management-by-objectives (MBO) systems, and Balanced Scorecards. These latter systems can hold managers accountable for capital-related measures such as asset turnover, inventory turnover, and days receivables.

Economic profit measures are intuitively appealing because they are consistent with finance theory. They signal to managers that they should make all investments promising returns greater than the company's cost of capital.

However, there is evidence in the case, and also in some academic research studies, that economic profit measures are not highly correlated with stock price changes and, hence, shareholder value. The correlation between economic profit measures and shareholder returns is probably higher in good economic times, when most performance indicators—shareholder returns and economic profits, as well as accounting returns, profits, and sales—are all generally trending upward. It is lower when the economic cycle is changing.

The problem is that shareholder value is based on market estimates of the *future*, while economic profit, like accounting profit, is a backward-looking measure. Economic profit measures do not provide the measurement panacea that their label implies.

The second and third assignment questions, which will be time consuming for the students, are clearly optional. They are designed to force students to get into the detail of the economic profit and bonus calculations. Without the numerical example, many students will gloss over the details of the calculations, assuming that they understand how the system works. But, there are a lot of complexities to comprehend.

The completed table is shown in Exhibit TN-2. To do these calculations, students must prepare the advertising expenditure amortization schedule, as shown in Exhibit TN-3. The economic profit calculation is shown in Exhibit TN-4.

The answer to assignment question 3 is shown in Exhibit TN-5.

The fourth question asks students for an evaluation of the new system. Each of the elements of the system can be evaluated separately. Each element has its advantages and disadvantages. Students should understand that there is no perfect system.

*Are economic profit measures congruent with changes in shareholder value?* There is indication in the case that it is not. But it may not be any worse than the various accounting measures, and it is better than just accounting profit, which does not have an asset focus in it.

The *automatic ratcheting of performance targets* has the advantage of taking politics and gamesmanship out of the target negotiation processes. But a ratcheting system does not use any knowledge about changing business conditions and prospects. The problem in the Spirits Division illustrates this. Is the 75% ratcheting parameter appropriately responsive to improving or declining performance?

The elimination of *payout thresholds and caps* is generally a good idea. The lower and upper payout constraints create ranges where there is no link between performance and rewards. Thus, they can undercut motivation and stimulate gamesmanship in those performance ranges. But, companies that use such constraints argue that they should not have to pay bonuses for performance that is not above minimal levels. And, they worry that extremely high payouts are likely to be more due to uncontrollable luck and/or poor bonus plan calibration than they are to extraordinarily good management performance.

The *bonus bank* idea is good in that it smoothes out the bonus payouts. This can be helpful to managers faced with paying a largely fixed set of personal expenses (e.g., mortgage). The bonus bank also provides an employee retention benefit. If managers leave the company, they forfeit all the remaining balances in their bonus bank. But the bonus bank makes the payouts less responsive to changes in performance. This can be seen in Exhibit TN-5. Thus, it can dilute the motivational messages that the incentive system is trying to provide to the managers.

A general criticism that students can make of the system, too, is that it is relatively *complex*. Can managers understand all the elements of the system, which is quite different from what they were accustomed to? If they do not understand all the details, does it really matter? Is all the complexity necessary?

The fifth question asks whether Mr. Embleton should make some kind of special allowance for the Spirits Division of Berkshire Industries in 2000 and 2001. This is a *controllability* issue. The poor economic conditions seem to be out of the control of the managers of the Spirits Division. If budgets were prepared for this division, the budgets could reflect the poor conditions. Use of a ratcheting system for setting performance targets does not take economic conditions into consideration. Should Mr. Embleton have empathy for the Spirits' managers? One purpose of implementing the economic profit system was to reduce the amount of discretion in the assignment of bonuses. On the other hand, if the division will truly suffer significant employee turnover because of the loss of bonuses, perhaps some intervention is called for.

### ***Pedagogy***

The teaching of this case will depend significantly on how much the instructor wants to get into the calculation of economic profit and the bonus awards. If the instructor wishes to have the students develop all the numerical answers to the assignment questions as posed, a reasonable timing for a 75-minute class is as follows:

The company and its need for change	10 minutes
The economic profit and bonus calculations	30
Evaluate the system and possible alternatives	25
The issue in the Spirits Division	<u>10</u>
	75 minutes

**Exhibit TN-1**

**Operating Data from Berkshire Industries' Snack Foods Division (£000)**

	1996	1997	1998	1999	2000	2001
<b>From the income statement:</b>						
Net operating profit before the following items:			137,051	162,401	184,898	194,321
Consumer advertising expense	(20,661)	(23,730)	(26,410)	(31,007)	(41,568)	(39,191)
Goodwill amortization	0	0	0	(15,000)	(30,000)	(30,000)
Net operating profit before taxes			110,641	116,394	113,330	125,130
Income tax payments			(41,293)	(51,501)	(54,131)	(60,327)
Net operating profit after taxes (NOPAT)			69,348	64,893	59,199	64,803
<b>From the balance sheet:</b>						
Net operating assets (book):			593,040	630,268	580,920	568,113
Accumulated amortization of goodwill	0	0	0	15,000	45,000	75,000
Economic profit				?	?	?
Economic profit performance target					28,000 <sup>1</sup>	?

<sup>1</sup> Established by management.



Division manager's bonus:

Target bonus

50%<sup>1</sup>

Bonus payout (% salary)

50%<sup>1</sup>

?

Note:

- 1) Cumulative advertising expense through the end of 1997 is £181,410.
- 2) Cumulative advertising amortized through the end of the 1997 is £167,507.

**Exhibit TN-2**

**Berkshire Industries' Snack Foods Division—Completed Table (£000)**

	1996	1997	1998	1999	2000	2001
Net operating profit before the following items:			137,051	162,401	184,898	194,321
Consumer advertising expense	(20,661)	(23,730)	(26,410)	(31,007)	(41,568)	(39,191)
Goodwill amortization	0	0	0	(15,000)	(30,000)	(30,000)
Net operating profit before taxes			110,641	116,394	113,330	125,130
Income tax payments			(41,293)	(51,501)	(54,131)	(60,327)
Net operating profit after taxes (NOPAT)			69,348	64,893	59,199	64,803
Net operating assets (book):			593,040	630,268	580,920	568,113
Accumulated amortization of goodwill	0	0	0	15,000	45,000	75,000
Economic profit					32,256	29,309
Economic profit performance target					28,000	31,192 <sup>2</sup>

<sup>2</sup> 28,000 + (32,256 – 28,000) \* 0.75

Division manager's bonus:		
Target bonus	50%	50%
Bonus payout (% salary)	65.2% <sup>3</sup>	43.9% <sup>4</sup>

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$$^3 0.50 + [(32,256 - 28,000) \div 28,000] * 1 = 0.652 \text{ (i.e., 65.2\%)}$$

$$^4 0.50 + [(29,309 - 31,192) \div 31,192] * 1 = 0.439 \text{ (i.e., 43.9\%)}$$

**Exhibit TN-3**

**Consumer Advertising Amortization Schedule for Snack Foods Division (£000)**

	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Consumer advertising expense	26,410	31,007	41,568	39,191
Amortization (3-year period):				
1996 expend.	6,887			
1997 expend.	7,910	7,910		
1998 expend.	<u>8,803</u>	8,803	8,803	
1999 expend.		<u>10,336</u>	10,336	10,336
2000 expend.			<u>13,856</u>	13,856
2001 expend.				<u>13,064</u>
Amortization of advertising expenditures under economic profit	23,600	27,049	32,995	37,256
Cumulative advertising expense since company was founded	207,820	238,827	280,395	319,586
Less cumulative advertising amortized through end of 1998 if economic profit had been used	191,107	218,156	251,151	288,407
Net capitalization of advertising for economic profit calculation of capital	16,713	20,671	29,244	31,179

**Exhibit TN-4**

**Economic Profit Calculation for Snack Foods Division (£000)**

	<b>2000</b>	<b>2001</b>
NOPAT:		
Net operating income before taxes	113,330	125,130
Add back: Consumer advertising expense	41,568	39,191
Subtract: Amortization of advertising expenditures under economic profit	(32,995)	(37,256)
Add back: goodwill amortization	30,000	30,000
Adjusted net operating profit before taxes	151,903	157,065
Current year's income tax payments (from Exhibit TN-1)	(54,131)	(60,327)
<b>Adjusted NOPAT</b>	<b>97,772</b>	<b>96,738</b>

Capital:		
Net operating assets (book)	580,920	568,113
Add: Capitalized advertising expenditures	29,244	31,179
Add: Accumulated goodwill amortization	45,000	75,000
<b>Adjusted Capital</b>	<b>655,164</b>	<b>674,292</b>
Capital charge (10%)	65,516	67,429
<b>Economic profit</b>	<b>32,256</b>	<b>29,309</b>

### Exhibit TN-5

#### Bonus Bank Balance Calculation for Manager of Snack Foods Division (£000)

	2000	2001
Beginning balance in bonus bank	0	13,680 <sup>1</sup>
"Excess bonus" earned	<u>18,240<sup>2</sup></u>	<u>(7,320)<sup>3</sup></u>
Balance in bonus bank	18,240	6,360
Excess bonus paid to manager	4,560	1,590
Target bonus	<u>60,000</u>	<u>60,000</u>
Bonus paid to manager	<u>64,560<sup>4</sup></u>	<u>61,590</u>

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<sup>1</sup> 18,240 – 4,560

<sup>2</sup> 15.2% × 120,000

<sup>3</sup> -6.1% × 120,000

<sup>4</sup> 60,000 + 25% × 18,240

## Catalytic Solutions, Inc.

### Teaching Note

#### ***Purpose of Case***

The Catalytic Solutions, Inc. (CSI) case was written to motivate a class discussion about some issues commonly related to the design of performance measurement and incentive systems in young, growing firms. The subject firm in this case is privately held, is still in a “pre-profit” situation, and is preparing itself for an IPO in, hopefully, the not-too-distant future. The case describes the company, its competitive advantages and strategy, and the elements of its employees’ compensation package. For at least some employees, this package includes three elements: salaries, stock options, and an annual bonus.

What is particularly interesting about the compensation package is that the firm’s annual bonus plan bases rewards primarily on non-financial measures of performance. This is not like the bonus plans used in most larger, more established firms, in which bonus awards are based primarily on financial measures of performance. In this case, CSI’s VP-Finance & Administration is quoted as saying that he doubts that financial measures would ever be more important than the non-financial measures in this plan. Thus, the case can be useful for motivating a class discussion on the role of non-financial measures in incentive systems as substitutes for, or complements to, financial measures.

#### ***Possible Student Assignment***

As with most cases, students can be given more or less preparation guidance in their assignments. If the instructor wants to provide relatively little guidance, we suggest this short-form assignment:

1. Evaluate the CSI performance measurement and compensation systems. What changes would you suggest be made to these systems, if any? Explain.

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*Professors Michal Matějka, Kenneth A. Merchant, and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Catalytic Solutions, Inc. case.*

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2. Fast-forward 10 years. Assume that CSI has been successful. It is now a much larger, public company. It has three operating divisions (investment centers) that focus on different markets. What would you expect the CSI measurement and compensation systems to look like at that time? Why?

Here is a possible longer assignment:

1. Evaluate the composition of the compensation package at CSI.
  - a. What are the advantages and disadvantages of awarding stock options?
  - b. What are the advantages and disadvantages of awarding bonuses?
  - c. Was the relative importance placed on salaries, stock options, and bonus awards reasonable? Why should CSI offer a mix of rewards rather than providing its employees 100% of their compensation based on 100% salary? On 100% annual bonuses?
2. Evaluate the specific features of the annual bonus plan in 2001 and 2002. Comment on:
  - a. The choice of the number of measures used, the specific measures used, and the changes in the plan between years;
  - b. The relative proportions of financial vs. non-financial measures;
  - c. The decision to base rewards on company-wide, rather than individual, performance;
  - d. The amount of subjectivity allowed in determining the bonus awards;
  - e. The calibration (target difficulty) of the bonus plans.
3. As CSI grows and, perhaps, becomes a public company, how will the firm's performance measurement and compensation package choices evolve?

## **Discussion**

### **A. Critical Success Factors**

One good way to get into the case discussion is to clarify the company's situation. This can be done by assembling a list of CSI's critical success factors (CSF). CSI seems to have developed a better product, a catalytic converter with better performance at lower cost. It must maintain that competitive advantage, and CSI managers think that they can do so.

CSI is trying to sell its product into an industry, automobile manufacturing, which is demanding and unforgiving. There are significant barriers to entry. On the other hand, the market potential is huge. To get market penetration, CSI managers must tell their product-superiority story effectively, and they must show the manufacturers that they can deliver the product with consistent high quality on schedule.

The list of CSF, then, should include the following:

- Product design—performance and cost. Maintain a technological advantage.
- Production capability—capacity, efficiency, quality, delivery.
- Sales/marketing—tell the story effectively to get customer commitments.

The list of CSF is complete if one can be comfortable concluding that if CSI does well in all of these areas that the company is highly likely to be successful.

If instructors have previously taught subjects like integrated performance measurement systems or Balanced Scorecards (BSC), these CSF could be reorganized and enhanced into a “strategy map.” If the BSC framework is used, then students should add the financial measures that they wish to track; they should identify the processes that will produce the desired customer value propositions; and they should show awareness of some of the learning and growth initiatives (e.g., training) that will allow the company to implement the strategy successfully.

## **B. Compensation Package**

The CSI compensation package has three elements: base salary, stock options, and annual bonus. The CSI strategy is to pay below-market salaries and then to use the other two elements to make the total compensation competitive.

One decision that can be usefully discussed in class is CSI managers' choice of the relative importance of the three elements of compensation strategy. Why did the company choose to use three compensation elements rather than just one, either 100% salary or 100% performance-dependent compensation? This should lead into a discussion of the purposes of compensation systems. These purposes include:

1. **Attraction/retention of good people.** Paying employees only guaranteed salaries tends to attract risk-averse employees. Paying performance-dependent compensation tends to attract employees who are more risk tolerant, more aggressive, more confident in their abilities, and/or more financially independent. What kind of people does a start-up company most want? Likely many more of the latter kind.

However, paying performance-dependent compensation subjects employees to risk. The employees must be compensated for this by paying them a risk premium, an expected compensation value higher than that they would earn just from a competitive base salary. This costs the company money. The size of this risk premium is impossible to calculate in the CSI case, particularly because of the difficulty of valuing the perceived value of the stock options. Subjecting employees to risk also complicates the administration of the compensation package. The company has to decide how to measure/assess performance and, if performance-dependent compensation is a large portion of the total compensation package, how to provide employees with enough cash to maintain their basic living expenses even through down performance periods. So, the additional cost to the company can be significant.

The stock option plan, in particular, helps employee retention. They have to remain with the company until the options can be exercised. The exercise cannot happen until the options vest and until the company creates a market for the stock by going public. Thus, the options provide a form of “golden handcuffs.”

2. **Motivation.** Motivation has two elements. One involves inducing effort, getting employees to work hard. The other is directing effort, helping employees understand what is expected of them. In the case of CSI, the induction of effort seems not to be a problem. CSI employees seem to be extremely hard working. But the company needs to inform and remind employees about what is important for the company to succeed. This is a primary purpose for the CSI bonus system.



### C. Stock Option Plan

The CSI compensation element that is least understandable for most students is the stock options. Options can provide huge payoffs to employees if the company is successful. Because their value depends on firm-wide performance, options can shape the culture of a company. They can help create a teamwork culture and cross-functional, cross-departmental cooperation. The options also provide compensation while conserving cash, which is often important in a start-up company. CSI is not short of funds. But even so the company's cost of capital is high, as much of the funding has come from venture capitalists.

The complication in this case is that CSI is a privately held company. What do stock options mean in a privately held company? There is no market for the options until, and unless, the company goes public, which it hopes to do in the next couple of years after the time of the case.

There is no easy way to value the CSI options. Employees can sell their options if they can find someone (e.g., a friend) to buy them, but the company has the first right of refusal on all options. In the meantime, the company is giving all employees options from the moment they are hired. The initial grants range from 200–20,000 options per employee. The 200 is typical for a production line worker. The 20,000 would be for a senior executive. A new engineer would be given 1,000–2,000 options.

Since mid-year 2001, the strike price on each option was set at \$10, based on an appraisal done at that time. CSI managers estimated that the company value had probably increased by 25–50% since mid-2001. (A new appraisal was being done in early 2003.) If one can assume that each share was worth \$15 at the time a new 1,000-option-share employee was being hired, then CSI is giving that employee options instantly worth \$5,000, plus the option value. But most employees do not understand what they are being given. This limits the value of the options to the company.

The problem is that CSI managers are limited in what they can tell their employees about the stock options. They are reluctant to provide an “official” declaration as to what the options are worth for fear of having the employees become disappointed if those values are not subsequently realizable. In Mike Redard's words, the conundrum was, “How do we communicate the value of the options without promising that value?”

### D. Bonus Plan

Since the focus of the case is on performance measurement, much of the class time should probably be spent on the bonus plan. There are many issues that might usefully be discussed.

One issue is the **level of measurement**. Both CSI performance-dependent compensation elements—options and bonuses—are based on company-wide performance, rather than the performances of specific individuals. Company-wide measures are really controllable to a significant extent only by a few managers at the top of the firm. But, for example, manufacturing employees, about half of CSI's workforce, were rewarded for new OE commitments (about 50% of the target bonus). Similarly, R&D people received half of their bonuses for execution of existing business and building infrastructure over which they presumably had little control. Moreover, while the R&D department influenced the likelihood of winning new OE commitments (reputation from cooperation with customers' development teams, determining product cost through specifications), their impact was likely to be minor relative to the contribution of executives responsible for new contracts.

This makes these compensation elements wealth-sharing features, rather than motivational features, in an effort-producing sense. The instructor can illustrate this point by discussing it in terms of any motivational theory, such as expectancy theory or path-goal theory. For most employees, the expectancy that an individual's behavior will accomplish the goals for which rewards are paid is quite small, so little or no motivation is produced.

Why does CSI do this? There are several reasons. One is that the company did not have in place well-developed systems to track the performances of individual employees. A second is that they are using the incentives to communicate the critical success factors to all the employees, and hoping to encourage teamwork through this wealth-sharing mechanism. And third, CSI managers are not greatly concerned about inducing effort; their employees are already working hard.

In 2004, CSI was moving to introduce some individual measures of performance in the bonus plan. The bonuses would still be based on corporate measures of performance, but the bonus payouts would be conditioned by individual performance ratings.

A second important issue is that involving the heavy use of **non-financial measures of performance**. In 2001, the bonuses were based exclusively on non-financial measures of performance. In 2002, financial measures were added, but their importance weighting was still much below that of the non-financial measures. (Table TN-1 shows a summary of the measures and their importance weightings in 2001 and 2002.)

Why does CSI base rewards on mostly non-financial, rather than financial, measures of performance? Most importantly, CSI managers believe that there are many ways to achieve financial results, but not all of these ways are desirable. The non-financial measures communicate to employees how top management wants the company to create long-term value. CSI managers find it easier to use non-financial measures because CSI is not publicly held. They do not have to try to communicate results to market investors and analysts, and they need not be short-term oriented, focused perhaps on quarterly earnings per share. So, the focus is on building their company through the drivers of long-term value creation. However, some summary financial measures of performance were included in the 2002 bonus plan. This reflected the managers' realization that when CSI became a public company, these measures would gradually become more important. (They termed their likely impending IPO as "the liquidity event.")

A third issue is the **choice of measures**. If CSI has chosen well, their measures should be a good representation of their critical success factors. Students might be asked to identify factors that are missing from the CSI lists. One that could be added would be an indication of the quality of the product delivered to the customer, as indicated, perhaps, by customer returns. Is it necessary to augment this list by adding some drivers of success in these critical success areas, such as balanced scorecard proponent suggest? Mike Redard does not believe that this level of complexity is necessary or desirable at this stage of CSI's history, if ever.

A fourth issue involves the use of **subjectivity**. CSI managers reserved the right to make subjective adjustments to the plan. The case provides one example where they exercised this right, in the case of the QS-9000 certification. Subjectivity is associated with its own set of advantages and disadvantages, benefits and costs. The advantage is that the subjectivity can be used to make the performance indicators and bonus awards more reflective of controllable performance and, hence, more fair to the employees. On the other hand, subjectivity can be misused, and if superiors grant bonuses even when performance targets have not been achieved

it can create an unfortunate expectation that can undermine the incentive value of the incentive awards.

The QS-9000 certification example illustrates those benefits and costs. The QS-9000 bonus award was given in 2001 even though CSI missed the target by few weeks. The danger here is the precedent. Might employees expect similar dispensation when they fail to achieve other targets in the future? But on the positive side, this subjective grant may have protected employees from uncontrollable factors (such as problems in getting an appointment from the agency awarding the certificate). The subjectivity shows management compassion and gives employees the reassurance that hard work will be rewarded. Mike Redard called this the “spirit of reward.”

A fifth issue that can be discussed is regarding the **number of measures**. Compensation consultants have several rules of thumb for choosing the number of measures to include in bonus plans. One is that not more than 5–8 measures should be included. Five to eight measures typically capture most of the important performance factors and including more measures only dilutes focus. Another rule of thumb is that each measure included in a plan should have an importance weighting of 5–10% of the total bonus impact. CSI's choices are consistent with both of these rules of thumb. The case describes one example of a potentially important measure that was left out of the plan. That measure was number of patents, which could be a useful value indicator for CSI. It was omitted from the bonus plan because patent attainment did not occur every year, and in any case only a few CSI employees were responsible for new patentable discoveries.

A sixth issue is that related to **calibration of the bonus payouts**. CSI managers strove for payouts near 100% of the target bonus level if all employees worked hard and smart. CSI managers recognized that there would be some variance between good and bad years. (If this variance did not exist, the bonus awards would be just deferred salary payments.) The actual payout for 2001 was 117.9% of the target bonus. In 2002, the payout was expected to be perhaps slightly less than 100% of the target.

Finally, the **size of the bonus awards** could be discussed. The CSI target bonuses in the range of 5–15% of base salary are low. They are probably not sufficient to make employees work extra hard to earn the bonus reward. The incentive effect of the bonuses is also weakened because there was no minimum performance threshold for awarding bonuses, so some bonus was always paid out. This reduces the pressure to meet short-term targets. And, as was mentioned earlier, the extrinsic incentive effect is weakened because of the emphasis on company-wide, rather than individual, performance measures. CSI used the bonus plan to make the total compensation package competitive in size and to communicate important organizational priorities to the employees.

## E. The Future

The last assignment question asks students to think about how the CSI performance measurement and incentive systems will change. CSI managers knew that their strategic themes were changing year-by-year. Here is their shortlist of themes for the early years:

### 2001

- New customers
- Build infrastructure

## 2002

- New customers
- Scale-up and execute
- Financial discipline

## 2003

- Grow existing base
- Execute
- Financial predictability

Mike Redard's guess at the strategic themes for **2013** was this list:

- SBU focus
- Customer retention/growth
- New market penetration
- Earnings/cash flow growth

Thus, Mike's guess as to what the bonus plan would look like in 2013 was that it would be more based on SBU performance than corporate performance. The measures would change, to focus more on growth and customer retention, rather than on the attainment of specific new customer commitments. It would focus more on penetrating new markets outside the automotive industry. And, it would have a financial performance component, although Mike still believed that financial measures would never be weighted more than 50% of the total.

## ***Pedagogy***

As with most cases, the instructor has to decide how structured to make the class discussion. In this case, because so many issues might be raised, some structure is probably necessary. We suggest following the outline of the discussion, with perhaps the following time allocation in a class of 75 minutes:

Company background and strategy	10 minutes
Compensation strategy	15
Stock option plan	15
Bonus plan	25
Guess about the future	<u>10</u>
Total	75 minutes

**Table TN-1**

**Comparison of Measures Used in the CSI Bonus Plan 2001 and 2002**  
**(Importance weightings shown in parentheses)**

<b>2001</b>		<b>2002</b>	
OE commitments	(41%) <sup>1</sup>	Financial	(27%)
Unit shipments	(35%)	OE commitments	(48%)
Quality	(15%)	Quality	(16%)
Infrastructure	(9%)	Infrastructure	(9%)
Total	(100%)	Total	(100%)

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<sup>1</sup> 95% ÷230%. (The total range of payouts is -15% to +215%.)



**University of Southern California**

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## **Dortmunder-Koppel GmbH**

### **Teaching Note**

#### ***Purpose of Case***

The Dortmunder-Koppel GmbH (DKG) case provides a vehicle for discussion of long-term incentive plans. These plans, which provide rewards based on performance over periods greater than one year, became popular in the late 1970s, and they are still in common use. They are also known as long-term performance plans (LTIPs). Their primary intent is to encourage managers to think about and act with longer-term perspectives in mind. The case describes a plan recently implemented by the US subsidiary of a large German conglomerate and includes reactions of some of the company's key managers to the plan.

#### ***Suggested Assignment Question***

Evaluate the new long-term incentive plan. Would the company have been better off doing something else? Or nothing?

#### ***Discussion of Issues***

Students evaluating the DKG plan will identify a large number of issues that can be usefully discussed in class. The case was written with questioning comments at the beginning and the end of the case, so the tendency of many students is to be critical of the plan. But since nobody really knows at this point what the effects of these plans will be, I think it is important to make sure supportive, as well as critical, comments surface.

In support of the plan, it may be said that before implementing the long-term incentive plan, DKG management did a careful analysis of the options and likely effects, and they selected particular features of the plan for good reasons. Furthermore, the DKG performance plan is not unlike those implemented by many other corporations. As a consequence, criticisms should not be accepted without careful scrutiny.

Sometime early in the class, it is useful to highlight the reasons why the plan was implemented. It is designed to be an integral part of a compensation package, and there is little

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using the Dortmunder-Koppel GmbH case.*

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doubt but that it will provide payoffs. But compensation can be paid exclusively in salary, so the unique purpose of this plan is to encourage managers to do more longer term, and hopefully creative, thinking and to make decisions that may sacrifice short-term performance in favor of long-term performance. Thus much of the discussion should focus on this central issue: Will this plan encourage managers to make decisions that are more long-term oriented than they would have in the absence of the plan?

This is not an easy question to answer, and there is certainly room for disagreement. Some students will point out, correctly, that this plan is a useful communication device. It reinforces the idea that quarterly and annual sales and earnings increases are not the sole indicators of success and that trade-offs can and should be made to sacrifice short-term performance for the long term.

Other students will argue that the plan will not have the desired effects. Several of the features of the plan might lead to this failure:

1. The long-term and short-term incentives are given equal weighting. This makes it likely that most managers will emphasize the short-term because there is a natural bias toward the short term: short-term payoffs are timelier, and the measures of performance are more controllable.
2. The perceived weak link between individual effort and rewards (i.e., lack of controllability) appears to be another problem. Two forms of lack of controllability exist. One exists because rewards are based on performance of entities larger than those which the managers included in the plan control. This element of the plan was designed to encourage cooperation between entities in related businesses.
3. The second controllability limitation is the possible environmental distortion of performance measures. Evaluating entity performance relative to each other could address part of this issue. But the company undoubtedly avoided relative measures of performance because they are much more difficult to administer.
4. It is possible that some managers were already doing as much long-term thinking as is desirable. But given the apparent focus on short-term considerations in the company, it is unlikely that this is the case in general.

The VP-Finance attended my class, and one student in the class asked him if he thought the plan was more important for long-term motivational purposes or for compensation purposes (i.e., so-called “golden handcuffs”). He said he was pessimistic as to the motivational benefits that would be forthcoming but he was sure this plan was an important part of the compensation package. He described the plan as maybe 90% compensation/retention, 10% motivation.

In addition to this important discussion about whether the plan met its primary objective, there are a number of other issues and risks that should be raised in class:

1. Will the plan cause managers to be more conservative in the presentation of their planning numbers? The answer to this question appears to be “yes.” How costly will this be?
2. The payoff cutoffs, both at the low and high ends, provide the motivation for managers to play games, such as to ‘save’ income for a later period. While supervisory scrutiny provides some measure of protection against such behaviors, the company would be better protected if it had a strong central finance function, or at least a group of internal auditors.

3. The company has recognized that it might be difficult to get good managers to transfer to unhealthy divisions. They have offered a two-year award guarantee. This could be expensive, yet there is no assurance that it is sufficient.
4. Should the performance indicators be different for each type of business? One manager of a mature business argued that cash flow was the best indicator of success for his entity, but administering a plan with a multitude of success indicators would be very difficult.
5. Can real growth be measured in every business? The manager of a computer services business noted that no good index was available to deflate his sales number. How many businesses are affected similarly?
6. Should the company have continued with some form of profit sharing? Most of the managers indicate that they prefer this long-term incentive plan, which is based on performance of relatively small entities, to the old plan, which was based on the performance of the entire corporation.
7. How much incentive compensation, as opposed to salary, should be provided?
8. What (if anything) should be done if one year is so bad that several years of payoffs are threatened? The answer is that probably nothing should be done because the plan would lose credibility, although it should be recognized that the long-term incentives may be reduced. This is the basic argument in favor of relative measures of performance (i.e., performance compared to that of competitors).

Toward the end of the class, it might be useful to ask if the fact that the parent company is privately owned is important. The answer is “yes,” this fact is important, for two reasons. One reason is mentioned in the case: publicly held companies could not make up for “lost cycles” in a long-term incentive plan as easily as DKG did. The other reason is that if the company were publicly owned, easily valued stock would exist, and the long-term incentive plan could be based on increases in stock prices.

Stock price changes are a useful performance indicator only for top management, however, and the company’s solution for long-term incentives for middle managers probably would not have changed because they were moving away from rewards based on collective (i.e., company-wide) achievement.

It is probably best to conclude the discussion without reaching a class consensus as to the likely effects of the plan. The value of the case is in giving students practice with their critical thinking.



## **Johansen's: The New Scorecard System**

### **Teaching Note**

#### ***Synopsis***

Regional and corporate managers at Johansen's, a large high-end department store, are preparing to attend the company's annual performance summit, at which the performance of each of the company's store managers is reviewed and rated. The company has just completed its first year under a new scorecard system for evaluation of manager performance. The manager of Store 51 has traditionally been one of the company's top-performing managers from a financial standpoint. But the new scorecard system evaluates managers based on both financial and nonfinancial metrics, and although the manager of Store 51 continues to exceed financial targets, his overall performance rating has declined due to performance along nonfinancial dimensions. The managers at the performance summit must discuss his performance in the context of a new performance evaluation system, measurement issues around the nonfinancial metrics, and retention concerns.

This case is designed to be taught as a traditional case study. An alternate longer version of the case "Johansen's New Scorecard System: The Summit" (UVA-C-2349)<sup>1</sup> is available that offers the instructor the opportunity to use the case as a role-playing exercise during class. In that alternative version, students are assigned specific Johansen's management roles and asked to debate the evaluation of the performance of Store 51's manager while at the performance summit.

#### ***Teaching Objectives***

The case is designed for a management accounting course that includes topics around performance measurement and evaluation, compensation and bonus systems, and related issues. It can also be used effectively in any course that addresses issues pertaining to performance management. It can offer an introduction to, or in-depth exploration of, performance measurement systems and how they work. Specifically, it can do the following things:

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<sup>1</sup> Luann Lynch, "Johansen's New Scorecard System: The Summit," UVA-C-2349 (Charlottesville, VA: Darden Business Publishing, 2016).

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*This teaching note was prepared by Luann Lynch, Almand R. Coleman Professor of Business Administration, with assistance from Jennifer Forman (MBA '14) and Graham Gillam (MBA '14).*

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- Invite students to consider the characteristics of effective performance measures
- Highlight the need for alignment between strategy and performance measures
- Offer the opportunity to discuss the pros and cons of objective and subjective performance measures
- Illustrate some of the issues that can arise around the implementation of new performance measurement systems

### **Suggested Student Assignment**

1. Why has Johansen's introduced the new scorecard system?
2. What is the company's strategy? What are the key success factors for successfully implementing that strategy? Describe the organizational structure in place at the company.
3. Consider each of the four perspectives of Johansen's new scorecard system. Why are they included? How are they measured?
4. What rating do you advocate awarding Clark? What are the key arguments you use to support that rating?

### **Suggested Teaching Plan**

We suggest the instructor pose the following questions to help guide the class discussion:

*Why did Johansen's introduce the performance scorecard? This part of the discussion should focus on two primary points:*

1. Deterioration in the company's financial performance prompted the company to introduce a new system that focused on three metrics: same-store sales growth, store gross margin, and store net income. The focus on financial metrics did lead to improved financial performance, but customer service suffered. The company conducted a study that offered three key insights: (1) the emergence of Internet retailers posed a new threat to Johansen's, and reinforcing excellent customer service was critical as a means to pull customers away from the Internet into the store for retail purchases; (2) market research suggested that a rival company's customer service was superior to Johansen's; and (3) cost-cutting efforts that led to greater profitability may have compromised customer service (the instructor can note the decline in selling, general, and administrative expenses as a percentage of revenues that might reflect lower resources devoted to customer service).
2. Johansen's strategy is to be a "premier high-end retailer," putting the customer first and offering an unparalleled customer experience. Superior customer service is a key success factor for the company's implementation of that strategy; any performance measurement system must focus employees' attention on that key success factor.

*Describe Johansen's organizational structure.* This task can lead to constructing an organizational chart such as that depicted in **Exhibit TN-1**. Note that the regions have a lot of autonomy and are operated as profit centers. Stores are also operated as profit centers wherein store managers have a lot of autonomy, but perhaps not quite as much autonomy as regional managers. Importantly, evaluating profit center managers based only on a profit-related

financial metric, particularly in a decentralized organization like this one, allows managers the autonomy to decide how to meet those profit goals. With the performance measurement system focused solely on financial metrics, store managers had that flexibility and apparently opted to improve financial performance through actions that sacrificed the customer experience. On the other hand, introducing measures in addition to the financial one places some limits on the autonomy managers have in deciding how to achieve those financial goals; they must achieve them while maintaining focus on the additional measures (in this situation, customer service).

*What things can store managers do? What things can they not do?* These are important questions because their answers have implications for the types of measures the company should use to evaluate the store managers' performance.

What store managers can do:

- Drive sales
- Affect customer experience in the store
- Determine in-store marketing and sales promotions
- Determine store merchandising
- Train and develop store employees

What store managers cannot do:

- Affect store location
- Affect the demographics of the customer base in the area
- Make major investments in the store

*How are promotions awarded?* Promotions from associate to store manager are made both within a store and across stores. Promotions from store manager to regional manager are typically—though not exclusively—made within a region and are heavily influenced by the ratings on the performance scorecard. Thus, the rating a store manager receives has important consequences for future career opportunities.

*Let's talk about your decisions regarding Clark's performance rating and get a tally of those decisions.* The instructor can list the performance ratings, 1 through 5, on the board, then indicate the number of students who opted for each rating. Barring some unforeseen circumstance, all ratings will be either a 4 or 5, since the tension in the case is around whether to award the 4 that Clark technically earns according to the new system or to override the 4 and award a 5.

*What are the requirements for awarding an overall rating of 5?*

Rating of at least 3 in all four categories

Rating of 5 in three of the four categories

Rating of 4 or higher in the customer service category

Note that, technically, Clark doesn't qualify for an overall rating of 5 because he received a rating of 3 in the customer service category. Ask those students assigning a rating of 5: *How can we award Clark a 5 if he doesn't meet the requirements to receive that rating?*

Students will likely offer the following arguments:

- Clark's customer service scores, both the response rate and the satisfaction score, showed improvement throughout the year.
- There are some issues with the customer service metric that should be considered: (1) the score is derived from a small sample; and (2) the customer demographics for Clark's area (which he doesn't control) are different than for other areas in ways suggesting that customers would be less likely to go online to complete the survey, which could lead to a low response rate (which Clark also doesn't control).
- Customer service is not necessarily a leading indicator of financial performance—note that Clark continues to rate highly on financial performance despite shortcomings in customer service.
- Differences across stores (in customer demographics and other characteristics) suggest that the stores should not all have the same target.

Ask those students who assigned a rating of 4: *Those sound like persuasive arguments. So why don't we give him an overall rating of 5?*

Students will likely offer the following arguments:

- Fairness—each store manager should be evaluated the same way.
- Customer service is a key success factor, and we have to make sure all managers pay attention to that.
- Customer service is a leading indicator of financial performance, particularly for an organization whose strategy revolves around it.
- Store managers do have control over customer service, so they should be able to influence it.
- Clark's response rate does not meet the required 12%, so he is eligible for a maximum "meets expectations" rating of 3; his customer satisfaction score does not meet the required 4.4 necessary to earn him a rating of 5 in customer service.
- The credibility of the new system hinges on not making exceptions such as this one.
- There will be considerable information transfer across regions regarding performance ratings because all regional managers are present in all store-manager-evaluation discussions.

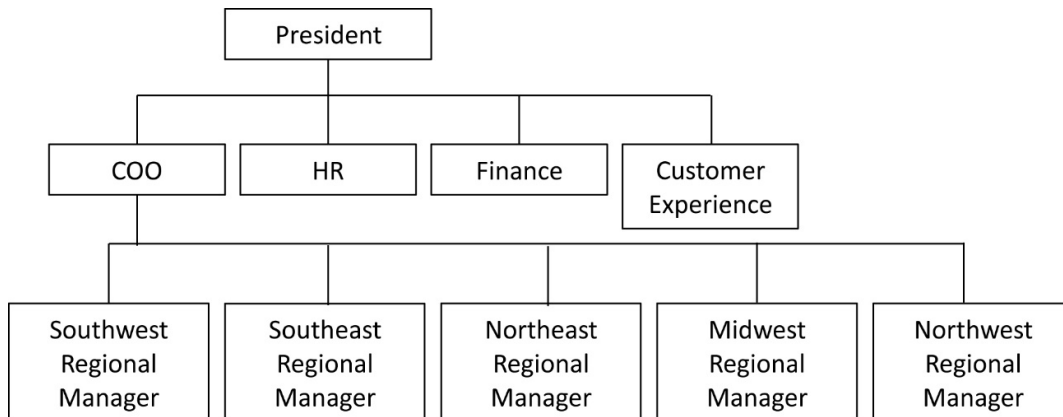
The instructor should be encouraged to follow the energy of the discussion at this point, as a lively debate likely will ensue between students advocating different ratings. Once the debate has run its course, the instructor can close the conversation with some final comments:

- Johansen's implemented the performance scorecard to better communicate its strategy and to redirect the focus of its employees back to the key success factor for that strategy—customer service.
- Overall, students should see that three primary questions emerged from the discussion: (1) whether customer service should be a metric on the Johansen scorecard (it clearly should, since it is a key success factor in implementing particular strategy); (2) whether customer service is being measured well (there are some issues of reliability and controllability that become apparent when evaluating the measure): and (3) given that the answer to the first question is “yes,” and the answer to the second question is “not completely,” what rating do we give Clark?
- Concerns about the way customer satisfaction is being measured led some of us to question whether we should follow the evaluation rules under the new system (i.e., reiterate the arguments that arose for a rating of 5) and suggest a change in the measure. Yet others of us wanted to follow the rules of the new system (i.e., reiterate the arguments that arose for a rating of 4).
- The issue was amplified by linking the measure to compensation. In such situations, it is critical to be clear about the organization's strategy, to have the right performance metrics, and to make sure the metrics can be measured reliably.

### Exhibit TN-1

#### Johansen's: The New Scorecard System

#### Johansen's Organizational Structure Chart



Source: Created by author.



**University of Southern California**

**Marshall School of Business**

Leventhal School of Accounting

## **Mainfreight**

### **Teaching Note**

#### ***Purpose of Case***

The Mainfreight case was written to illustrate the functioning of a large, successful international logistics company that does not engage in an annual budgeting process. The goal in this case is for the students to think about what budgeting is, and what it is not, and how Mainfreight can succeed without having a budget, which is a control system element that most companies think is essential. This case shows that there are alternatives to budget-based performance management systems.<sup>1</sup> It will force students to question their taken-for-granted assumptions that all organizations need budgets.

The case can be used in other ways, too, including:

1. Instead of focusing on what is missing from Mainfreight's results control system, instructors could teach this case as a good example of a "cultural control" system.
2. The systems in this case can be compared and contrasted with those in companies following the "Beyond Budgeting" (BB) management philosophies and principles. In this textbook, the Statoil case provides such as example. Mainfreight managers do not call their company a BB company, although the Mainfreight founders seem to have had the same ideas about management that inspired the BB movement.

#### ***Suggested Assignment Questions***

1. Mainfreight's top executives, three of whom are qualified accountants, maintain that their company does not prepare budgets. Is that contention accurate? How should one determine whether a company prepares a budget or not?

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<sup>1</sup> Instructors who want a more detailed description of Mainfreight's system can find it in O'Grady and Akroyd (2016).

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*Professors Kenneth A. Merchant and Winnie O'Grady wrote this teaching note as an aid for instructors using the Mainfreight Case.*

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2. At the very least, Mainfreight's management systems are nontraditional.
  - e. What are the key elements of Mainfreight's results control systems?
  - f. Why did Mainfreight managers decide to take a nontraditional approach?
  - g. How does Mainfreight perform the functions typically fulfilled by budgets? Or are some of those functions really not that important?
  - h. Does the Mainfreight system address the limitations of traditional budgets? Does it introduce new limitations?
3. Is Mainfreight a well-controlled organization?
4. Should companies that now use an annual budgeting process try to emulate some or all of the management systems used by Mainfreight? Why or why not?

### **Prerequisite**

Presumably, most instructors using this case will have previously taught a class or a module on standard management processes, including budgeting, or otherwise ascertained that the students know about that topic. But even so, it might be useful to review with them the problems with budgeting that have led to calls for fixing or abandoning traditional budgeting. Budgets are flawed for use as either plans or performance standards because they are obsolete the day after they are prepared, as changing business conditions cause the planning assumptions to be wrong. They create a number of problems, including misrepresentation of business prospects (e.g., sandbagging), the stifling of creativity, focus on budget achievement rather than value creation (e.g., short-termism), the gaming of reporting (e.g., earnings management), resource allocation delays, "spend-it-or-lose-it" actions, and huge time costs (e.g., Jensen, 2001). Seemingly, most companies should have incentives to eliminate the formal preparation of budgets, but few of them do. That is what makes the Mainfreight case so interesting. This company's system is quite different from the norm.

### **Case Analysis**

#### **Question 1**

In order to answer the question as to whether or not Mainfreight engages in budgeting, one has to have a definition of budgeting in mind. Here is a fairly typical definition and description:

Budgeting is a process that involves the preparation of a "quantitative expression of a proposed plan of action by management for a specified period" (Horngren et al., 2012, p. 184). In most industries, that specified period is typically one year, which is broken down into shorter time increments (quarters, months). The budgets are used as an important performance standard in periodic performance reviews.

Does Mainfreight or any of its entities engage in budgeting? Technically speaking, the answer to this question is "no." No one in the company prepares an annual budget. There is no formal budgeting process, and no detailed proforma financial statements exist. Neither does the company have a formal strategic planning process or a formal strategic plan.

Some students might argue that Mainfreight does engage in budgeting because it has performance targets. This is not worth much of an argument. Just try to clarify these students' definition of budgeting, which must differ from the traditional definition, and move on.

**Question 2**

Mainfreight's founders believed (and still believe) that budgeting is a waste of time. They were looking for an alternative way to run their company.

Their belief is that everyone wants to, and does, contribute to the company's success. "Team members" are trusted and empowered to make decisions in the best interest of the company. The company's open information policy ensures all team members have access to the information they require. The operational systems provide the information that allows branches to coordinate their activities dynamically. As volumes flowing through the system increase, each division and branch can scale up by, for example, hiring additional staff and buying additional forklifts, to handle it. Consequently, branch managers are responding to actual rather than planned volumes. Their decisions are guided by the strong organizational culture of what constitutes acceptable behavior and by the heuristics defining acceptable levels of performance. Mainfreight's information systems enable weekly monitoring of financial results and KPI performance. Team members are expected to work cooperatively, and coordinate dynamically to ensure smooth operations throughout the network. Bonuses, which are all team-based, reinforce the idea that everybody is on the same team. Discretionary bonuses are used to reward superior performance.

To be able to make all the desired comparisons and contrasts with a traditional management control system built around a formal budgeting process, it is necessary to deconstruct the concept of budgeting so that students can see all the purposes served by budgeting and all the problems they can cause. Then the traditional budgeting system elements can be compared with those in the Mainfreight system.

Budgets typically serve multiple purposes in an organization, including planning, motivation, resource allocation, revenue and cost control, performance evaluation, and coordination. These purposes are fundamental organizational needs that have to be fulfilled regardless of the management system used. **Table 1** describes each of these elements briefly and explains how Mainfreight accomplishes each of those purposes without engaging in a formal budgeting process.

**Table 1 How Are the Roles of Budgeting Fulfilled by Mainfreight's Approach?**

Roles of budgeting	Mainfreight's approach
<p><b>Planning</b> Budgets (and strategic plans) define expectations of the future; they force managers to look into the future and to make decisions in advance.</p>	<p>Build 100 year company through continual growth; enter new markets, open new branches and establish profitability; grow revenues, increase volumes (stated in 2011 Annual Report)</p>
<p><b>Motivation</b> Annual budgets typically define a threshold level of performance that is used in calibrating annual incentive payouts</p>	<p>Timeless 15% profit target; KPI targets set minimum expectations for areas of performance such as claims, credit notes and receivables; hire passionate people, empower them and let them contribute to performance (intrinsic motivation); motivation via healthy peer</p>



	competition; wide ranging recognition of team and individual contributions through financial and non-financial rewards; team bonus at 10% branch profit
<b>Resource allocation</b> Specify which activities can be undertaken and to what extent	Resources made available as opportunities and risks arise throughout the year; no allocations set at start of financial year
<b>Revenue and cost control</b> Analysis of budget variances used to minimize departures from planned performance	Weekly financial and KPI results compared to last year, profit targets and peers; 240 branch general ledgers facilitate control
<b>Performance evaluation</b> Budgets are used as standards for evaluating and rewarding individual performance	League tables (relative performance evaluation) rank branch performance relative to peers; overall performance judged in light of prevailing conditions
<b>Coordination</b> Budgets define minimum levels of performance; organizational entities can generally be expected to perform at that level or better	Proprietary IT systems provide real time operational information to enable interdependent branches to mutually adjust activities; informal networks facilitate direct coordination around current activity levels

Mainfreight's approach clearly addresses some of the limitations of traditional budgeting. It requires less management time and is, therefore, less costly. It allows managers to stay focused on managing their businesses. The managers have no opportunities to play games in setting performance targets or in managing earnings to meet fixed, but potentially obsolete, budget targets. The relative performance evaluation and dynamic resource allocation processes allow these elements to be less bureaucratic/more dynamic.

### Question 3

Is Mainfreight a well-controlled organization? One would have to say "yes," given the company's excellent performance over an extended period of time.

Are there risks with Mainfreight's system? Sure. If the organization employs people who should not be trusted, or if the culture breaks down, then the company could face problems. But, it should be noted, Mainfreight's management is monitoring operations quite closely, even if they are loathe to interfere. They have an early warning system in place.

The case does refer to some tension in the organization. The Logistics division earns substantially lower bonuses (maybe only in the hundreds of dollars) because of the high capital investment costs charged to the branch P&Ls. In the freight division, team members can earn bonuses in the thousands, if not tens of thousands or more. Consequently, the logistics team finds ways to increase their overtime to bump their income. Should the bonus potentials be equalized?

There is also tension about the setting of branch-level targets. The idea is for them to be set as realistically as possible and for the branches to deliver that performance. It appears that some branches are better able to anticipate expected targets and some are not even close. Senior management relies on these targets for its decisions and was considering how to ensure branches

set reliable but somewhat stretch targets. Managers in the organization had begun discussing the possibility of changing the bonus scheme to introduce penalties/rewards for deviations from the set target, increasing or decreasing the bonuses by 1–2% depending on the size of the discrepancy. Doing this opens up opportunities for gaming on the targets, just like what happens with traditional budgeting.

In the grand scheme of things, though, these issues seem relatively minor. All companies have little issues like this to address. These particular issues seem eminently addressable.

#### **Question 4**

Should companies that now use an annual budgeting process try to emulate some or all of the management systems used by Mainfreight? This is a difficult question to answer. Clearly the Mainfreight system works for this company. The company has operated profitably since it was established in 1978; it was listed on the NZ stock exchange in 1996; it operates in different countries (cultures), including in Australasia, North America, Mexico, and Europe, and it has grown to have annual sales of NZ\$1.8 billion (US\$1.3 billion), and has over 5,000 employees.

But for a system like Mainfreight's to work elsewhere, first and foremost, top executives would probably have to have a management philosophy emphasizing employee empowerment, rather than command-and-control. This approach to management is sometimes called "radical decentralization." It involves a high trust in employees ("team members") to act in the best interest of the company. Starting with this philosophy, as Mainfreight did, is undoubtedly easier than switching to it after everyone in the organization is accustomed to a traditional command-and-control management philosophy.

Other conditions that might make it easier to adopt a system like Mainfreight's:

- Relatively simple operations. They are more likely to be found in service-type companies than in manufacturing organizations.
- Little interdependency between operating units, meaning relatively little organizational coordination is necessary.
- Relatively homogeneous operating units to facilitate relative performance evaluations.
- Stable business, making history a reasonably good performance comparison standard.

#### **Pedagogy**

The major concern in teaching this case is that the Mainfreight system is so different from what the students are accustomed to they will not know how to tackle the case. The instructor will need to provide some guidance. We think the best way to teach the case is to contrast the elements and purposes of the systems that the students understand—traditional budgeting—with those of the Mainfreight system. Following the assignment question ordering is one useful way to organize the class discussion.

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## **Statoil**

### **Teaching Note**

#### ***Purpose of Case***

This case describes the innovative, even radical, management systems of a company that combines the major elements of Beyond Budgeting and Balanced Scorecards into an approach called “Ambition-to-Action.” The Ambition-to-Action approach involves the replacement of a unitary budgeting process with three processes that separate the major purposes of budgeting: planning, resource allocation, and performance evaluation. It also involves the use of key-performance-indicator scorecards that, interestingly, do not cascade tightly from the top to the bottom of the organization. They cannot be consolidated into corporate-wide measures, and they are not even all updated at the same time. Statoil’s approach also involves the use of relative performance evaluations where suitable external performance standards can be identified.

Statoil’s ostensibly radical approach to budgeting, but also to performance measurement and evaluation to some extent, stretches students’ minds. It can cause them to question some basic assumptions previously taken for granted, such as regarding the benefits of annual budgeting. But the Beyond Budgeting approach taken by Statoil is still relatively rare. Is it superior to what most companies do and, hence, an innovation that will spread? Or is it a budgeting approach that only works for some companies in certain circumstances? If so, where and why is it likely to work?

#### ***Possible Background Reading***

Direct students to the Beyond Budgeting Roundtable website ([www.bbrt.org](http://www.bbrt.org)). Have them click on the “Beyond Budgeting” tab on the left panel and read the material in that section, titled “About.”

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*Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Statoil case (A211-01).*

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### **Suggested Assignment Questions**

1. Statoil managers claim that their company no longer prepares a budget. What do they mean by that claim?
2. Why did Statoil decide to abandon budgeting?
3. Describe the new processes that Statoil implemented to replace the budget. What are its strengths and weaknesses?
4. Is the Statoil “Ambition-to-Action” system just a routine implementation of the Beyond Budgeting approach, or does it include some additional features or fail to uphold some of the Beyond Budgeting principles?
5. The “Beyond Budgeting” approach is still relatively rare outside Europe. Why? Is there something about non-European cultures that limits its applicability, or are other companies just slow to catch on to an innovation that has started in Europe?

This is a complex case. Depending on the class time available, instructors may not be able to cover all aspects of the case in detail. They could focus exclusively on the Beyond Budgeting aspect of the case, for example.

### **Suggested Discussion Questions and Analysis**

1. What purposes are served by the annual budgeting process used by most companies?

Students will provide a variety of answers, but most of them can be organized into the categories of (1) forecasting, (2) target setting, and (3) resource allocation, or if not organized this way, the instructor should highlight these three purposes, because it is these that Statoil has chosen to separate. (**Exhibit TN-A** appended to this note lists a more comprehensive list of possible reasons to budget.)

It is also useful to point out that budgeting focuses on financial measures that provide a universal language. They can be used to describe at least some aspects of the functioning of every business unit and operation. Budgets also have a nice feature in that the forecasts and targets cascade automatically from the top to the bottom of the organization.

2. Statoil managers were displeased with the traditional budgeting process that the company formerly used. Why?
  - a. **Conservatism.** If the forecasts are used as performance targets and, hence, as the bases for performance evaluations (as is the case in most companies), they naturally become conservatively biased.
  - b. **Narrow financial focus.** Statoil managers saw the need for consideration of a more holistic view of total performance, rather than focusing heavily, or even exclusively (as in some companies), on the financial measures. In the case, Bjarte Bogsnes says that “accounting numbers are getting more distant from our business,” in part because of the increasing volatility of oil prices. People constraints were often more important than were capital constraints. Bjarte also says, “You can’t read strategy out of a budget, but you can read strategy out of a good scorecard.”

- c. **Micromanagement.** Detailed budgets invite higher-level managers to micro-manage their subordinates. One illustrative quote from Bjarte Bogsnes indeed suggests that, “If you have a detailed budget, you don’t have to make decisions. It’s all been decided for you.”
- d. **Obsolescence.** The budget forecasts were meaningful only for a short time after they were made. As conditions changed, they became obsolete, yet they were not updated until the next annual budgeting cycle. In the meantime, considerable effort was spent in explaining variances from the obsolete budget targets.
- e. **Timing misfit.** The annual planning cycle did not fit the planning horizons and forecasting “rhythms” of all the Statoil businesses. Some (e.g., construction of offshore platforms) had long lead times, while others were quite short-term oriented (e.g., oil trading). Some needed to update their forecasts much more frequently than others.
- f. **Gameplaying.** Particularly at the cost center level, there was a tendency to treat the monies allocated in the budget as “entitlements” that must be spent, thereby encouraging “spend-it-or-lose-it” behaviors.
- g. **Resource allocation delays.** Getting monies allocated for very large projects was usually not a problem, as capital requests could be made at any time. Getting monies allocated for smaller, operational items, however, could be delayed if those monies were not already approved in the budget. Managers would have to wait until the next annual budgeting cycle for “the bank to be open” again, even if the desired expenditures were deemed value-creating.

Note that several of these issues of traditional budgeting systems that Statoil is trying to address can be broadly termed as conducive to various “budget games that managers play,” which importantly often cause them to act myopically. Later in the case analysis, instructors may want to ask the students’ views on the extent to which they believe Statoil’s approach is an effective way to remedy the myopia problem (or rather is just likely to drive it elsewhere—and if so, where)?

- 3. What are the major differences between a traditional budgeting process and the Statoil “Ambition-to-Action” process?
  - a. Statoil separates the three functions of budgeting: forecasting, target setting, and resource allocation.
    - i. Forecasts compensate for the lack of agility; they are updated as needed—*not* on annual cycles. In terms that Bjarte often uses, “Supertankers need forecasts. Speed boats not so much.”
    - ii. They never say that the managers “must deliver on their forecast—hence, the forecasts are not “budget targets in disguise.” Forecasts are *not* targets. There will always be *noise* in the forecast. They want to eliminate *bias*.
    - iii. Resource allocations are handled in a separate process, also unshackled from an “annual cycle”, where the “bank is open year round.”
  - b. Statoil uses a balanced scorecard for a more holistic portrayal of performance.
    - i. Holistic should be taken to mean assessing both the “what” and “how” managers deliver results. The evaluators do not just look at the KPIs. The actions and strategic objectives provide a richer understanding. Adherence to company values is also weighted 50% in the performance evaluations.

- ii. Unlike the standard Balanced Scorecard model, Statoil puts the financial dimension of the balanced scorecard on the bottom because they found that it dominates the discussion when it is put on top. They want the focus on people.
  - iii. It was normal for units to identify 10–20 KPIs. (The range was 5–25.) Bjarte thinks that 20–25 is too many, but he is quick to point out that “the perfect KPI does not exist.”
  - iv. An interesting quote from Bjarte: “The Balanced Scorecard cannot work unless you do away with the budget. In conflicts between a budget and a Balanced Scorecard, the budget always wins. When we kicked out our budget, we got an amazing turbo charging of the process.”
- c. Where they can, Statoil managers use KPIs that describe *relative performance*, ideally relative to an external benchmark (e.g., the performance of competitors or like inside units), or at least relating outputs to inputs (e.g., cost per barrel). The reasons:
- i. Relative KPI targets do not have to be updated as often as fixed (absolute) targets.
  - ii. Relative targets are self-motivating because no one wants to be a laggard.
  - iii. Relative targets enhance learning, as information can be shared by high-performing organizations.

If fixed targets had to be set, they should be set at an aggregate, not a detailed (e.g., line-item) level.

- d. Statoil uses Ambition-to-Action documents that provide a direct link between strategic objectives, the KPIs that can be used to monitor performance, and the actions necessary to affect the KPIs and, hence, to implement the intended strategy.

Appended to this teaching note are two additional Ambition-to-Action examples, documents from cost-center organizations that instructors can show their students if so desired. One is from an organization called Platform Technology and Marine Surveys, which is charged with maintaining Statoil’s technical advantages in offshore drilling. The second is from a corporate staff function—Corporation Communications.

Note: Some areas of planning at Statoil have not changed, or are not different from “common” practice. One is the setting of strategic objectives. Some of these are set with a 10-year horizon. The strategies are quite stable, but people need a reminder of strategy every time. Ambition-to-Action is believed to be an effective tool for that.

### Issues for Discussion

1. In January 2011, Bjarte Bogsnes estimated that if every manager within Statoil used the process, upwards of 2,000 Ambition-to-Action documents would be generated and maintained. But at the time of the case, there were only 1,100 such documents in existence, meaning that many managers were not participating. Is this a problem? (All of the upper-level managers, however, participated actively in the process.)
2. The KPIs did not “cascade” from the top to the bottom of the organization. Instead, the scorecard targets were said to be “translated” from one organization level to another. Only a few targets (e.g., oil produced) could be consolidated. The KPIs could be, and were,

changed from period to period, perhaps hindering comparisons over time. Could this/should this be “tightened up”?

3. The managers chose their own targets. No level of performance was imposed on them. Statoil managers thought that the use of relative performance KPIs caused them to set more ambitious targets for themselves because no one wants to be a laggard. If this assumption/belief is correct, should all companies allow managers to set their own performance targets, or does this work only with relative performance targets?
4. The performance evaluations are holistic but quite subjective. Statoil managers think that evaluations can be made only with the advantage of hindsight. But subjectivity creates its own problems, such as evaluation bias. Is the high use of subjectivity evidence of an immature, or if not that, an overly complex, performance measurement/evaluation system? Also, how convincing is Elder Saetre's claim that “it takes a few years for employees to understand how it works, but then it can be very credible”?

One conclusion to leave with the students is that the Statoil system is directly related to the company's managers' beliefs about people, which affects their philosophy of management (see **Exhibit TN-B** appended to this note). They do not believe in the *command-and-control* (Theory X) style of leadership, which they believe fits the traditional budgeting model. Instead they believe in a more dynamic and flexible form of management that involves *empowering* their managers and employees (Theory Y).

That said, Statoil's top management strongly believes that the Ambition-to-Action process is not “anarchy,” as the CFO is careful to note in the case. It provides for maintenance of a coherent vision and direction from the top to the bottom of the organization, plus motivation, information sharing, and oversight.

As such, one could argue that Statoil relies on a more “balanced” *combination* of (a rather unusual type of) results control *and* cultural control. Would Statoil's unusual approach to results control be as effective without the support of, or belief in, a matching culture?

## **Pedagogy**

This is a complex case. The teaching of it works better if students have a basic understanding of the traditional annual budgeting process used by the vast majority of organizations worldwide. Then, contrasts can be drawn between traditional systems and this Beyond Budgeting system.

The Balanced Scorecard aspect of the Statoil system seems quite loose, as the measures do not cascade automatically from the top to the bottom of the organization. But that is by design. This is an aspect of the system that is left up to the wisdom of the managers.

Another interesting issue to discuss is the implementation process. The process took place over many years, and indeed at the time of the case it is not done. But top management did not force lower-level managers to participate. They offered the tool and provided training, and then left the implementation up to the managers' discretion.

At the end of class, instructors should remind students that this system seems to work well for Statoil. They have been using the Ambition-to-Action system for many years, and they are continuing to develop their processes around this system. At the very least, the Ambition-to-



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Action system has not harmed the company—Statoil is one of the best-performing energy companies in the world. It remains puzzling, then, why Beyond Budgeting systems like that used in Statoil have not been more widely adopted.

Instructors who want to bring out all of these issues in one class period will have to be quite structured and be careful about the management of time.

PLATFORM TECHNOLOGY CROSSING ENERGY FRONTIERS		
Strategic objectives	Performance indicators (% linked)	Actions (top 5)
<b>People and organisation</b>		
Realise the full organisational potential	GPS Job satisfaction > 4,8	Balance manning according to PTM strategy and competence plan based on Statoil's business needs (JAW) (31.12.10) ✓
The preferred place to perform and develop	GPS Leadership > 4,7	Continue leadership development and compliance training (AMS) (31.12.10) ✓
A value based and performance driven organisation	GPS Living our values > 4,9	Establish Statoil/PTM LT portfolio overview covering all phases (TO) (31.12.10) ✓
		TBC 2011 - Meet strategic requests from prioritised business customers - DRAFT (31.12.10)
		Strengthen the PTM organisation (BJO) (01.10.10) ✓
<b>Health, safety and environment</b>		
A compliant and learning organisation	Personnel injuries	PTM risk register (KS) (15.12.10) ✓
A risk focused performance culture securing zero harm	Serious HSE incidents	TBC 2011 - Implement actions from PRIMA (BJO) (01.12.10) ✓
Safe vessel operations globally	GPS PRI - Psychosocial risk index	Learn from Quality and HSE incidents (KS) (31.12.10)
	HSE competence compliance	TBC 2011 - Perform TTS plan and PTM inspection of suppliers (KS) (31.12.10)
	Not more than 13 month between each Statoil SIRE inspection for Statoil TC vessels	Improve safety standards in international marine operations (TO) (31.12.10) ✓
	Not more than 10 observations on external SIRE reports for Statoil TC vessels	
<b>Operation</b>		
Qualify and implement deepwater floating concept enabling enhanced recovery	PTM CAR index	TBC 2011 - Build FPS concept portfolio and identify cost drivers to support CoM / deepwater regions with flexible and cost efficient solutions (SIE) (01.12.10)
Maximize value creation in projects and operations	Vessel utilization	Improve Riser Integrity Management of flexible risers on operation (JAW) (31.12.10)
Maximise robustness and reliability of dynamic risers		TBC 2011 - Extend service life and increase weight capacity on ageing installations (JAW) (31.12.10)
Realise the full potential of ageing installations		TBC-2011 Development and implementation of reliable Inspection methodology (SIE) (31.12.10)
Leading provider of cost efficient solutions for offshore new energy developments		TBC 2011 - Develop governing documents and BP for offshore wind (31.12.10)
<b>Market</b>		
Develop industry leading technical solutions for frontier developments	GPS Courageous Publications	Establish development plans and activities for each of the five PTM focus competence areas (TSM) (31.12.10) ✓
The preferred technology provider within Platform Technology's area of responsibility		Profiling PTM's competence and deliver results in accordance with demand (TO) (31.12.10) ✓
High quality deliveries from external suppliers		TBC 2011 Establish long-term dedicated relationship to selected PTM Partners (TSM) (31.12.10) ✓
Successful Platform Technology innovation and implementation		Strengthen process to implement innovative technologies (TSM) (31.12.10) ✓
<b>Finance</b>		
Excellent QA and QC securing high quality support to investment decisions	Indirect costs	MTO PTM LCI: TBC 2011 - LCI Solution- common LCI tools and methods (BJO) (31.12.12)
Cost effective utilisation of resources	SAP task response time	
	Utfaktureringsgrad	TBC 2011 - Secure early involvement and quality in concept development ✓

Merchant and Van der Stede, *Management Control Systems: Performance Measurement, Evaluation, and Incentives*, 4e, Instructor's Manual

To build knowledge, reputation and pride – enabling Statoil to cross energy frontiers

Strategic objectives	Performance indicators (*, linked)		Actions (top 5)
<b>People and organisation</b>			
A values based and performance driven COM organisation	Living the values (Global People Survey)	📌 📌	Complete organisation review, by integrating selected functional areas and networks (31.12.10)
Secure compliance and learning in COM	Living the management system (Global People Survey)	📌 📌	Process ownership: Rejuvenate networks, clarify operating models, optimise work processes and principles (31.12.10)
	People@Statoil process	📌 📌	
<b>Health, safety and environment</b>			
A working environment promoting health, well-being and safety	Health and working situation (Global People Survey)	📌 📌	Develop and implement HSE plan 2010, based on corporate risk and COM challenges (20.12.10)
<b>Operation</b>			
A trusted company (employer, partner and operator) Recognised as values-based, collaborative and responsible	Top rank Corporate Reputation Index Peer group (TNS Benchmark Study Norway)*	📌 📌	Implement action-oriented Statoil Communication plan 2010, ensuring focus, consistency and alignment across COM organisation (31.12.10)
	Brand Affinity Index (TNS Reputation Web Tracker Norway)	📌 📌	Develop and implement global external launch programme for 'new Statoil' (31.12.10)
	Internal pride / identity (Global People Survey)	📌 📌	Follow-up internal vision and mission campaigns, mobilising around strategy/identity (31.12.10)
	Top score Corporate Reputation Index (TNS Global Reputation Study)**	📌 📌	Develop and implement quantified, media outreach plan for CEC members (VC) (31.12.10)
<b>Market</b>			
Recognised as a superior COM function fully integrated in the business	Media relations (TNS Global Reputation Study)	📌 📌	Implement complete and dynamic management channel for leadership issues/development (31.12.10)
	Business Support Index (New BA Management Survey****)	📌 📌	
	Internal Communications Satisfaction (Internal communication Survey)	📌 📌	Implement optimised issue management process, aligned with reputation analysis and risk mapping (31.12.10)
	Internal Communication Open and honest (Global People Survey)	📌 📌	Contribute to business decisions through early identification and description of country risk and proposed mitigating actions (VC) (31.12.10)
<b>Finance</b>			
Cost efficient communication organisation	Staff Costs	📌 📌	Implement actions to reduce costs and increase efficiency; deliver on 2010 target (del.) (31.12.10)

## Exhibit TN-A

### Reasons to Budget

- Strategy implementation:
  - Operationalizing/translating strategy
  - Capital allocation (capital budgeting)—RESOURCE ALLOCATION
- But also:
  - Goal setting, strategy formation (periodic “interactive” reviews—cf., Simons)
- Communication and coordination:
  - Information dissemination (e.g., top-down about organizational goals) and collection (e.g., bottom-up about entity revenues, costs, and business possibilities)
  - Information coordination (through the hierarchy as well as laterally across entities)
- Operational planning:
  - Annual resource allocation and financial planning (e.g., estimates of spending by department)—RESOURCE ALLOCATION AND FORECASTING
  - Pre-action reviews of annual plans (e.g., sales plan, production volumes, staffing)
  - Cost control
- Performance evaluation:
  - Establishing results accountability and providing motivation through budget targets—TARGET SETTING
  - Performance reviews (periodic reviews of performance relative to plan, including variance analysis)

And also:

- Authorization or permission to spend
- Consensus building (reaching agreement)
- Ritual

## Exhibit TN-B

### Beliefs about People: Theory X vs. Y

#### Theory X

- Employees are inherently lazy, unambitious, averse to taking responsibility, and valuing security above all else.
- These employees must be coerced, directed, and possibly threatened with punishment in order to get them to work toward organizational objectives.

#### Theory Y

- Employees as being self-directed if they are committed to organizational objectives and accepting of responsibility.
- Theory Y employees should be allowed considerable autonomy to use their innate skills, creativity, and imagination to solve organizational problems.

Statoil managers' beliefs:

CEO Helge Lund:

“One of the main principles in our Ambition-to-Action concept is that Statoil consists of mature, professional and able people who both can and want to accept responsibility.”

Bjarte Bogsnes:

“We believe that perhaps 90% of our employees have Theory Y traits. We are not naïve. We know that some behave more like Theory X. But you can't let the minority drive your management concepts.”

“We operate in a rapidly changing environment. We are continually facing expected threats and opportunities. We cannot operate with a centralized command-and-control approach, which would fit the Theory X view of human nature. We must allow our employees considerable autonomy.”

“Statoil's leadership culture reflected Theory Y thinking for a long time, but our management processes did not match that culture. We were inconsistent. Now, with the Ambition-to-Action Program, we have a match.”

## Olympic Car Wash

### Teaching Note

How large should the bonus pool be for the Aalst location?

One possible solution

Flex the budget based on number of hours of good weather.

	Budget	Actual	"Flexible" Budget	Controllable Variance (Actual – Flex Budget)
Revenue	€184,000	€124,080	€108,100	€15,980
Variable expenses (50% of revenue)	92,000	62,040	54,050	(7,990)
Fixed expenses	<u>53,820</u>	<u>55,000</u>	<u>53,820</u>	<u>(1,180)</u>
Total expenses	<u>145,820</u>	<u>117,040</u>	<u>107,870</u>	<u>(9,170)</u>
Profit	<u>38,180</u>	<u>7,040</u>	<u>230</u>	<u>6,810</u>

Size of the bonus pool = € 3,000 + 681 = 3,681

While this solution is simple and straightforward, it is far from the only possible solution to this case. Students might well be asked to judge whether zero is a possible correct answer to this case. It is. Jacques Van Raemdonck might well conclude that no adjustments should be made for the uncontrollable effects of weather for any of the following reasons:

1. The weather constantly varies. While the employees were unlucky during the recent Spring quarter, they have been lucky in prior quarters. It evens out.

*Professors Kenneth A. Merchant and Wim A. Van der Stede prepared this teaching note for the sole purpose of aiding classroom instructors in the use of the Olympic Car Wash case study (A203-11).*

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2. The company perhaps cannot afford to pay bonuses in periods when it is not taking in healthy amounts of cash.
3. The costs of making these adjustments exceed the benefits of making them. In order to make these adjustments, someone has to keep track of periods of rain that will deter customers from getting their cars washed. Some difficult judgments might be required. For example, how much rain warrants an adjustment? More than “a drizzle”? A duration more than “a brief shower”? Is just the threat of rain a justifiable cause for an adjustment? Is it not possible that customers will just defer their car wash until a good weather period, resulting in no (or little) actual loss of business? And if an adjustment seems warranted, someone has to sit down and do the calculations.

Note that regardless of the reasons, this approach of not adjusting for this weather factor, or any other uncontrollable factor, forces employees to share some risk with the owners of the company. The employees will have to be compensated somehow for bearing this risk.

But even if it is decided to make adjustments for the unforeseen 330 hours of bad weather (the difference between budget and actual), many solutions are possible because of the effects of what textbooks describe as “joint variances.” A variance analysis is a systematic way to explain the difference between two numbers, such as an actual and a budget target. The variance ascribed to any particular factor will depend on the order in which the factors are introduced into the analysis. This can be illustrated graphically as is shown in Figure A:

**Figure A**  
**Graphical Representation of a Variance Analysis**

<i>Factor</i>	<i>Budget</i>	(1)	(2)	(3)	(4)	<i>Actual</i>
Hours of good weather	P	A	A	A	A	A
Vehicles/hr.	P	P	A	A	A	A
Revenue/vehicle	P	P	P	A	A	A
Variable costs	P	P	P	P	A	A
Fixed costs	P	P	P	P	P	A

Figure A shows that the budget is based on planned assumptions about each of the factors that affect performance. This is shown with the letter **P**. The actuals are calculated based on the actual levels for each of those factors, here designated with the letter **A**. The effect of each of the factors on performance can be calculated by changing the factor from **P** to **A**, or **A** to **P**. The difference between the budget and column (1) can be called the “weather variance.” The difference between columns (1) and (2) is the “productivity variance.” The difference between columns (2) and (3) is the “price variance.” And so on. If the budget is the starting point, the analysis is known as “flexing” the budget. If the actuals are the starting point, the analysis is known as “adjusting actuals.”

The numerical solution shown on the first page of this teaching note took the budget as the starting point. It changed the hours-of-good-weather factor from the planned to the actual amount to calculate the performance effect of the poor forecasting of hours of good weather. Note that the “flexible budget” column in that solution left all of the other factors at their planned (or budgeted) levels. This is, in effect, the analysis shown as column (1) in Figure A.

If the factors had been introduced into the analysis in a different order, or if the actuals had been adjusted first for weather, the resulting answer would be different. Just as one example, consider the numbers that would result if the actuals were adjusted first for the effects of the mis-forecast hours of bad weather.<sup>1</sup>

	Budget	Actual	"Adjusted Actual" <sup>2</sup>	Controllable Variance (Adjusted Actual – Budget)
Revenue	€184,000	€124,080	€211,200	€27,200
Variable expenses (50% of revenue)	92,000	62,040	105,600	(13,600)
Fixed expenses	<u>53,820</u>	<u>55,000</u>	<u>55,000</u>	<u>(1,180)</u>
Total expenses	<u>145,820</u>	<u>117,040</u>	<u>160,600</u>	<u>(14,780)</u>
Profit	<u>38,180</u>	<u>7,040</u>	<u>50,600</u>	<u>12,420</u>

Size of the bonus pool = € 3,000 + 1,242 = 4,242.

This answer is as theoretically correct as the €3,681 answer given on the first page of this teaching note. So too are all of the other answers that would result if the performance factors were introduced into the analysis in a different order. If the incentive plan promises that adjustments will be made for the effects of specific uncontrollable factors, care must be taken to explain just how those adjustments will be made.

This little case is not as simple as it might first seem.

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<sup>1</sup> Note that this is identical to “flexing the budget” but considering the effects of the hours-of-bad-weather factor *last* in the analysis.

<sup>2</sup> What actual performance would have been if the hours of good weather had been as forecast in the budget.

## **Beifang Chuang Ye Vehicle Group**

### **Teaching Note**

#### ***Purpose of Case***

The Beifang Chuang Ye Vehicle Group (Beifang) case describes a simple, but real, example of an uncontrollable factor affecting a company's results. The effects of the uncontrollable event—a change in laws—are huge. Thus, the case makes it easy to motivate a discussion of whether managers and salesmen should be protected from the effects of this event, and if so, how. The case fits nicely with the discussion in Chapter 12 of the textbook.

Since Beifang is a Chinese company, headquartered in Beijing, the case also provides an opportunity for some useful secondary learning. Students can get an inkling about what managing in China is like. They will see, for example, that Beifang, like most Chinese companies, uses performance-dependent incentive compensation, even though Chinese is an avowedly communist country with a socialist market economy.

#### **Assignment Question**

To what extent should Mr. Zhou compensate his employees, even though his company is losing money? Why? What factors did you take into consideration in making your judgment?

#### **Case Analysis**

The Beifang case describes just one uncontrollable event; a new municipal law requiring all new cars sold in the Beijing city limits to have a fuel injection system. The first question to ask is: From the perspective of the Beifang employees, is this event uncontrollable? Clearly the event itself is uncontrollable, but Beifang's shareholders should expect its managers to respond to this event, and they did not. This cost the company at least two full months of sales. Someone should be held accountable—Beifang's top managers. They assumed, incorrectly, that the government would not enforce the new law.

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*Professors Kenneth A. Merchant and Wim A. Van der Stede wrote this teaching note as an aid to instructors using the Beifang Chuang Ye Vehicle Group case.*

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Who, exactly, are Beifang's top managers? The case does not provide much information about the organization structure. In fact, the Beifang ownership and organization structure is quite complex. We judged that a complete presentation of these structures would involve too much detail for this simple case. For purposes of the class discussion, it is sufficient to focus on three roles: the corporate vice director and general manager (Ming Zhou), the dealership manager, and the salesman.

As the top manager, Ming Zhou had to be involved in the assumption that the government would not enforce the law and the decisions based on that assumption. He should be held accountable for this decision, and he will be because he, and his family, are among the largest owners of the company.

At the other extreme, the salesmen were clearly not involved in the poor decision-making. Should they share the pain of the company's losses? There are arguments for and against making them share the pain.

Rationale for paying salesmen (and other employees) full salary and bonus based on the revised plan:

1. The problem is not their fault. They shouldn't be made to suffer.
2. The owners of the company are more diversified and are thus better able to bear the risk.
3. If Beifang does not pay its employees, they will find another job.

Rationale for not paying the salesmen:

1. The company is not earning any money. Where will the cash come from?
2. There is nothing for the salesmen to do. They won't be working for a couple of months and, hence, won't be creating any value.

In the middle of the organization are the managers of the dealerships. Whether they should share the pain can be explored with the students, both assuming they were and were not involved in the poor management assumption and forthcoming decisions. Is this the key question to ask? Yes, it probably is.

In this case, the solution was not black or white. The company compromised and paid the salesmen what it could afford in order to retain as many of them as it could.

## ***Pedagogy***

This case is quite short, and the issue is straightforward. It can probably be discussed adequately in 40–50 minutes of class time. The suggested ordering of the questioning in class is as discussed above.

To fill a longer class period, instructors can present supporting lecturettes, other controllability examples, or go down the tangent of management in China. Here are some other controllability examples that could occur in the industry in which Beifang operates. The question in each case is: Should employees be held accountable for the effects of these events?

1. After the company's plan was prepared, the company faced increased competition. Prices and profits declined.
2. After the goals were set, the manufacturer changed the price list. This affected the profits sold on each model of car.
3. There was an uninsured fire in the dealership. The fire was caused by faulty electrical wiring.
4. An employee who was delivering a car to a customer was involved in an accident that is only partially insured.

These examples map to the classification of examples presented in Chapter 12. The first two examples are of economic and competitive factors. The third, if the fire is judged to be uncontrollable, is an act of nature. From the perspective of a salesman, the third example is of organizational interdependence.

## Hoffman Discount Drugs, Inc.

### Teaching Note

#### ***Purpose of Case***

The Hoffman Discount Drugs case was written to illustrate a different method of dealing with uncontrollability problems. This company makes adjustments for uncontrollables only if they are larger than a pre-set threshold level through a type of *ad hoc* variance analysis performed by corporate managers. The store managers must bear the full risk of all small things.

The case can also be used in conjunction with Chapter 2 because it describes a reward system that students can understand relatively easily.

#### ***Suggested Assignment Questions***

Evaluate the HDDI Store Management Bonus Plan. What, if anything, would you change? Explain.

#### ***Case Analysis and Pedagogy***

As this is a fairly easy case, I use it as the first case in which students are asked to consider controllability issues explicitly. Then I start class with a lecturette on risk aversion, the costs and benefits of making managers bear risk, and methods companies can use to protecting managers from business risks if they choose to do so.

Then it is useful to consider the store manager's job. How much autonomy do the managers have? What do they have to be good at to succeed?

Instructors can employ an unstructured approach with this case and simply open up the evaluation question. That is my preferred style. Reward system like this one should be evaluated in terms of their abilities to motivate the right behaviors (at reasonable costs).

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Alternatively, instructors can direct students' attention to each of the system elements. These are the performance standards, the measures, the rewards, and the adjustments for uncontrollables.

### **Performance Standards**

The only thing that is somewhat unique about the performance standards is that they are set in a top-down manner. Do corporate and regional managers know enough to be able to set good, fair, monthly standards for sales, net income and inventory performance for each of their many stores? They claim they do. They are aided by a database containing detailed histories of each of the stores, by the fact that the stores' performance can be compared to a considerable extent, and a relatively stable operating environment. In other words, there is relatively little information asymmetry between the store managers and the regional and corporate managers. Top-down target setting also has advantages because it is relatively efficient, and it avoids lower-level manager game-playing. Although students can consider this question, the case does not raise any issues in this area.

### **Performance Measures and Links between Measures and Bonus Payments**

Managers earn bonuses based on performance measures: net income and sales, with the importance weighting between these two measures 75% and 25%, respectively.

1. Are these the right measures? They are both very short-term oriented (but store managers are probably not making any long-term investments or decisions).
2. Why should store managers have to cover allocations of corporate expenses? (It doesn't really matter if these allocations are factored into the performance targets.)
3. Why any focus on sales? Isn't the goal to produce profits (or really shareholder value)?
4. What is the advantage of basing bonuses on net income and sales, rather than a set of MBO-type targets (e.g., growth, inventory control, cost control, store cleanliness)? (This raises the issue of use of bottom-line summary performance measures vs. measures that lead to the bottom-line performance.)
5. The bonus formula considers both positive and negative variances from net income objectives equally. If managers exceed their targets, they earn a bonus larger than their net income bonus objective, and vice versa. Positive variances have the same (but opposite effect) as negative variances.
6. There are upper and lower bonus constraints. If annual sales are less than 90% of budget, no bonus is earned regardless of how much profit was earned. The maximum bonus payable is 500% of the pre-set bonus objective.

### **Rewards**

The bonuses are paid in cash. As described in Chapter 9, cash rewards are not durable (people quickly forget they got them), but they are a common, and valued, form of reward.

The bonus objectives vary by level. Store general managers' objectives ranged from 15 to 20% of base salary; assistant managers' bonuses ranged from 3 to 5%. These bonus potentials are not high, but these are not high-level managers in the corporate structure.

The bonus payments are made semi-annually to provide more timely reinforcement than would be provided by annual payments.

Overall, it must be said that the rewards provided are in a valued form (cash) and are provided on a timely basis.

### **Adjustments for Uncontrollables**

Corporate managers established for themselves the right to make whatever adjustments to the measured results they wanted to adjust for uncontrollable effects. They claimed, however, to make adjustments for only three types of uncontrollables: natural disasters, robberies, and rioting and looting. But are all of these events really uncontrollable? Many fires are caused by poor building maintenance or careless personnel. (For example, what if the fire was caused by an employee's careless handling of gas canisters?) Some robberies are caused by lax security measures. Shouldn't the corporate managers investigate the causality (controllability) of each event (or would it be too costly to do so)?

Do store managers have the right to decide whether to buy insurance to protect against the costs of some of these events? Probably not, but if this were the case, should corporate provide any adjustments if the insurable events occur and the manager decided to self-insure?

Corporate managers will make no adjustments for changing economic conditions, bad performance standards, or other forms of bad luck (e.g., personnel turnover). If adjustments are to be made, is it right to limit the adjustments only to the three identified types?

Should the adjustments be made at the end of the year through the *ad hoc* variance analyses? Why not make the adjustments immediately after the event occurs, perhaps by altering the performance objectives?

Corporate managers also limit their adjustments to "material" effects which, for a larger store, means a profit effect of greater than \$20,000 per incident. This policy means the store managers have to manage all the little things well, but they are protected from the deleterious effects of large uncontrollable events. The line defining materiality is admittedly arbitrary, however.

Is there room for gameplaying by the managers? Might they be inclined to throw some extra merchandise into the fire in order to make the loss greater than \$20,000?

The example described at the beginning of the case shows the negative behavioral effects of the policy. But are Jane Firstenberg's complaints credible? A loss of \$17,000 is probably around 2% of her store's annual net income, and thus, this event will cost her a relatively trivial amount in loss of bonus, and it will cost her subordinates even less. Would this event, by itself, cause her subordinates to leave? Aren't her complaints just whining?

How expensive is it to make these *ad hoc* variance analyses? If, as the case states, each store has one or two of these events each year, corporate managers must consider between 400 and 800 of these adjustments. Many of them are probably routine, but how many are not?

## **Other**

The system is conceptually fairly simple. The explanation of the plan (Exhibits 1 and 2), which are disguised company documents of a real company, seem quite complex, however. Do the store managers really understand how the plan works? Couldn't it be simplified without great loss of effectiveness (e.g., by removing the sales measure from consideration)?

Overall, however, the system seems reasonably well thought out. Students may propose some modifications, but the class should be prepared to examine the disadvantages of each of the improvements proposed.



**University of Southern California**

**Marshall School of Business**

Leventhal School of Accounting

## **Howard Building Corporation, Inc.**

### **Teaching Note**

#### ***Purpose of Case***

The Howard Building Corporation (HBC) case was written to illustrate the design and functioning of a control system used in a project management environment. This level of analysis (projects) is different from a financial responsibility center, but the control principles are the same. The case can also be used as a capstone management control case because it contains a broad set of issues, including those related to budgets, performance measures and evaluations, and incentives.

HBC has been in business successfully for a long time. That is a good indicator that they have good people and that their control systems are effective. However, the final accounting for the specific project illustrated in the case showed a loss on the bottom-line. Students are asked to figure out what caused the loss. Was the project doomed from the start, bid poorly, or managed ineffectively? Was HBC just unlucky? Or could the project be deemed to have been a success even though it generated a loss, which would mean that profit is not the sole measure of performance?

#### ***Suggested Assignment Questions***

1. From the perspective of HBC's owners, was the LA Prep project a success?
  - a. If so, how did you make that determination?
  - b. If not, where and why did the project fail? Should anyone be held accountable for the failure, or was it just "bad luck"?
2. Now with the benefit of hindsight, what would you suggest could have/should have been done differently?

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3. Would you recommend that HBC make changes to its project management system? If so, what?

## **Discussion**

HBC has been in business successfully for a long time. That is a good indicator that the company employs good people, and its management systems are effective. However, the case is focused on one project. Maybe that was a success story ... or maybe not.

### **1. Evaluation**

One question that is directly relevant to an accounting class is whether profit is a good measure of success. In addition to the loss, the project took more than double the planned time (45 weeks instead of 20), which means that there is an unmeasured opportunity cost because resources were tied up in the LA Prep project. Most students will conclude that since the project generated a loss, it cannot be considered a success from the perspective of HBC's owners.

However, some students will point out that the best way to judge performance is *long-term* profit, and HBC might receive some longer-term benefits from having done this project. In this sense, the loss might be seen as an investment that would provide future benefits. In class, Paul McGunnigle agreed with this perspective. He answered the question this way, "Profit is also measured in terms of relationships."

- HBC could demonstrate experience and expertise in doing this kind of food-business incubator project that could lead to further work in this area. Indeed, they subsequently served as an advisor to an organization in Chicago that was planning to build a food-business incubator similar to that of LA Prep. HBC did not do the whole job because they do not do TI work outside the greater Los Angeles area, but it appears that they did demonstrate expertise in this area.
- The company could further its reputation and relationships with local government authorities, such as those in the City of Los Angeles, as well as architects, engineers, and subcontractors. Those relationships could provide some benefits in the future. HBC receives business referrals from all of them.

Some students will suggest that HBC try to put a value on the publicity to be received right up front to see if getting involved in a difficult, potentially money-losing project will be worth it. However, HBC does not do that; they just rely on management judgment.

Students also need to think about whether HBC would be getting a positive recommendation from LA Prep after completion of this project. The relationship was strained a bit at the end.

### **2. Analysis**

Whether or not this project was a success, something can be learned from the outcome, which generated less profit than was hoped for. Each of these possibilities can be usefully discussed:

1. Was this the project doomed from the very start? It was known to be quite complex, and with a client short of money. Do you think HBC managers regret having gotten into this



project? Another way of asking the question: Knowing what they know now, do you think the company would accept a project like this if another similar opportunity came in?

An important element of management in this business is deciding which projects to bid on and which to let go. Regarding this LA Prep project, though, even in retrospect HBC's managers concluded that they would be interested in taking on a project like this again.

2. Was this a bad budget, perhaps an underbid in an attempt to get the business?

Some students will draw this conclusion. However, HBC was given this job even before they created the first budget. In addition, comparing the original budget for the work to be done with the actual costs incurred before changes shows a small *positive* variance (see Exhibit TN-1). The original work budget seems to have been conservative. The big variance was in the General Condition costs, which was caused by the duration of the project extending well beyond what was expected.

It appears true, however, that the contingency was set too low for a project this complex and with so many uncertainties (e.g., involving so many subcontractors and starting work with only 70% of the drawings complete).

3. Were the cost increases incurred during the course of the project charged to the client appropriately?

This was a big problem. HBC did not push back on LA Prep hard enough to pay for the cost increases or otherwise scale back the proposed work. The Subcontractor costs increased by \$907,653, but only \$549,191 charged to LA Prep (see Exhibit TN-2).

It is useful to look at some or all of the specific examples described in the case. Which of the change orders can be tied back to HBC as a mistake?

- a. CO #2—This change should have been paid entirely by LA Prep and reflected as an increase in the contract price. HBC's contingency funds should not have been used, as this was clearly a scope change. In addition, the two-week delay cost \$11,954 in general condition costs, and this also should have been paid by LA Prep, via a delay claim.

Another way to interpret this issue is as a bidding problem. The case clearly states that the project scope almost always changes significantly once drawings are complete. One could argue that the extra two weeks to process these changes should have been included in the duration estimate in the initial bid.

- b. CO #4—This change caused by an error in the drawings was appropriately paid for by the client as an increase in the contract price. However, the delay in the project was not paid for by the client.
- c. CO #10—This was appropriately paid for from HBC's contingency budget. This is exactly what the contingency is for: The cost of the agreed upon work came in higher than expected for an unforeseen reason.
- d. CO #78—This was not really a scope change. It should have been paid for with HBC's contingency budget, had any more funds been available. In the absence of available contingency monies, the costs probably should have been borne by the client, especially

since HBC had already generously allowed them to use their contingency for scope changes.

- e. CO #94—This was neither a scope change nor an unforeseen cost. It was a routine expense that contractually was supposed to be paid for by client. However, HBC was remiss in not billing it in a timely manner—an admitted mistake. LA Prep was correct in asserting their legal rights, but this was really an expense that should have been paid by LA Prep.
4. Paul McGunnigle is quoted in the case as saying that there are always issues and problems on projects. Do you think the problems faced on this project were typical or extraordinary?

In class, Paul McGunnigle said that he thought the problems faced on this project were pretty typical. Every project that HBC gets involved in is unique, and each has its own set of challenges.

5. At the end, do you think top management was surprised by the final loss? In other words, does the company have sufficient controls in place to inform management how the project is running vs. budget, both in time and money?

There was no surprise. HBC uses lots of controls to ensure that management stays well informed, including:

- i. Signature approvals required for every X cost
- ii. Variance reports updated monthly
- iii. Weekly meetings with executives in attendance, or at least copied on detailed minutes.

Top management was aware that this loss was forthcoming and, in fact, their decisions contributed to the final accounting.

6. Who should be held responsible/accountable? Does the loss reflect badly on those involved in the LA Prep project? For example, was the PM not aggressive enough in pushing back against the client? Should the project executive have been present at more meetings to fight more of the battles for the PM?

When asked if he and his team were evaluated negatively after the loss on the project, Craig (the PM) joked, “Well we are all still here.” He went on to explain,

The decisions made were generally correct. The project was successful for everyone except the bottom line. You have to evaluate whether you made dumb mistakes or conscious errors. Yes, we were the better partner to make sure the project was successful. Yes, some of our decisions resulted in a loss. However, there was still a beneficiary, and it was HBC. The LA Prep project was risky, but it came with recognition. The project reinforced our reputation in the industry, and made us better in our own eyes and in outward opinion.

However, Craig acknowledged that HBC wouldn't still be in business if it took a loss on every project and, he concluded, “In general we probably viewed this project too philanthropically.”

Mike Howard concurred.

I was not happy about how the project played out, but it is acceptable to have a negative project once every five years or so, and perhaps more acceptable in this case because of the philanthropic nature of the LA Prep project. HBC has had a good year nonetheless. Craig did not receive a bonus on this project, but he is a proven, capable PM. He has made a lot of money for the company over the years, often managing the more complicated, difficult projects.

Paul McGunnigle explained that the company made no system or procedural changes based on lessons learned from the LA Prep project, but he said that some counseling for the people involved in the project was provided. He said:

It should not have gotten to the point where had to give up our profitability to maintain our relationships. The problem signals were there. We put a lot of pressure on our PMs to be client-oriented; maybe too much.

HBC has been involved in about 5,000 projects over the years. Most people are reasonable if you communicate well with them, and clients respond favorably when you treat them well. We all just need to answer the question, "What is fair to everyone involved?"

What I worry about most is "contract ambush." Most contracts are just boilerplate. But every once in a while we are faced with a unique contract that puts us at specific risk that we cannot control. We did not have that problem here.

7. Could this problem have been solved with a change in the project manager's incentive contract? If the project manager had a much more sizable incentive contract based on project profits, would he have been more aggressive? Moreover, if so, is that what the company would have wanted?

Certainly a lucrative incentive contract could change behavior, to include making the profit manager more assertive in pushing back against the client and the subcontractors. However, that is not what HBC wants. They want their project managers to be "client-oriented."

## **Pedagogy**

This case can be discussed as is described in this teaching note, starting with the evaluation and then working back into the specifics. I have taught the case successfully that way with older MBA students. However, there are other alternatives. With younger, less experienced students who are unfamiliar with project accounting systems, it could be valuable to walk through the elements of the company's control system first, before getting into the details of this specific project. Another possibility is to talk about the specific issues faced on the project first. Then conclude the class with the evaluation-of-performance question. I can imagine that any of these approaches could work.

**Exhibit TN-1**

Reformatted case Exhibit 4 to highlight comparison of the original budget with the actuals before change orders

-- Column (of case Exhibit 4) --			
	A	C	Variance
General conditions	\$119,537	\$315,439	\$(195,902)
Insurance	<u>66,755</u>	53,421	13,334
Other (work line items)	<u>6,393,178</u>	<u>6,069,208</u>	<u>323,970</u>
Subtotal	\$6,579,470	\$6,438,068	\$141,402

**Exhibit TN-2**

Reformatted case Exhibit 4 to highlight comparison of the costs of changes with those borne by the client

-- Column (of case Exhibit 4) --			
	Total changes to owner contract	<u>Total cost of changes</u>	Variance
General conditions	\$2,662	\$15,742	\$(13,080)
Insurance	5,496		5,496
Other (work line items)	<u>541,033</u>	<u>891,911</u>	<u>(350,878)</u>
Subtotal	\$549,191	\$907,653	\$(358,462)

## Bank of the Desert (A) and (B)

### Teaching Note

#### *Purpose of Case*

The Bank of the Desert (BoD) case was written to provide students with a performance evaluation setting that is close to being as complex as that which managers face in real-world settings. The case is supported by a database containing several pieces of annual performance-related data (i.e., measures, targets) from 253 branches of a large bank.

To solve the performance evaluation questions posed in the assignment, the students have to decide which pieces of data to use and how to weight them in evaluating the branches' performances. When managers decide to use a multi-measure approach in a results control system, how can they judge whether any particular combination of measures (and their weighting) is good or bad? That is the big question presented in this case. Students can think of this task in terms of the Balanced Scorecard (BSC) framework if they wish, but the bank does not have measures at the branch level for all the elements of the BSC.

This case was also designed to illustrate an "opportunity metrics" approach to judging branch performance. This approach is a sophisticated application of relative performance evaluation (RPE). Instead of merely judging each branch's performance against its pre-set goals (e.g., budgets), the opportunity metrics approach involves comparing each business entity's (retail branch) actual performance with its *potential*. "Potential" is assessed by observing the actual performance of like units. Since not all branches are alike, a clustering procedure must be used to identify like units and to group branches into relatively homogeneous sub-populations. The final step in the opportunity metrics approach involves quantifying the shortfall between each branch's performance and its potential. This quantification reveals the performance improvement that is possible if the branches can realize their potential. In other words, it is an indication of how much money the branches are "leaving on the table."

The case and the data in the supporting database are real, but disguised. In the real situation, the managers of the bank were stunned at the conclusions stemming from the

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*Professors Kenneth A. Merchant, Wim A. Van der Stede, and research assistant Xiaoling (Clara) Chen prepared this teaching note as an aid for instructors using the Bank of the Desert case.*

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opportunity metrics analysis. But then they had to decide what to do with the new insights. Mirroring the real-world situation, at the end of this case, students are presented with another set of issues, those related to the possible implementation of this new approach to evaluation.

### **Suggested Assignment Questions**

The assignment is presented in two parts, relating to the (A) and (B) cases. Both assignments require students to use the BoD database that is available on the publisher's website.

The assignment provides students with a lot of "hints" as to how to do the analyses (see endnotes on last three pages of this teaching note). Instructors who might want students to struggle with this assignment, as in a term project, might not want to provide all these hints.

Appended to this teaching note is an Appendix that provides a description of each of the elements in the BoD database. This Appendix should be provided to students along with the assignment.

BoD (A) case:

1. Using only the data in the DB1 worksheet in the BoD database, calculate the correlations between:
  - a. The two performance measures that are included in the branch incentive system: number of sales per FTE (column AH in the database) and cross sell ratio (column AF).<sup>1</sup>
  - b. Each of these measures and total branch profits (column Y).
  - c. The percent of target achievement for the two measures included in the incentive system.<sup>2</sup>

What do these correlations tell you?

2. If you were the president of the Branch Network (Annette Lo), where would you focus your attention? Which branches need the most help? We will focus our class discussion *only* on branches #219, 337, 821, 1482, and 7373. Based on the information that you have available in the DB1 database, classify each of these branches into one of the following four categories: Excellent, Good, Below Average, Poor. What data did you focus your attention on, and why?
3. Using the bank's system for evaluating branch performances for the *purpose of assigning bonuses*, evaluate the performances of the same five branches as listed in Question 2.
  - a. Would the employees of any of these branches be given *zero* bonuses because their branch failed to achieve its performance targets?<sup>3</sup>
  - b. In which of these branches would employees earn particularly large bonuses because actual performance exceeded targets by 30% or more?
  - c. Are your conclusions sensitive to the importance weightings assigned to the two performance measures? For example, would the branch rankings change if the two dimensions were weighted equally? Or if the cross sell ratio was given the 75% importance weighting?

4. Evaluate BoD's existing performance measurement and evaluation system.

BoD (B) case:

1. Working with the data in Worksheet DB2 only, calculate the market opportunity for each of the branches. Note that market opportunity includes market penetration opportunity and customer value mix opportunity.<sup>4</sup>
2. Calculate the customer retention opportunity for each branch.<sup>5</sup>
3. Add the market opportunity and customer retention opportunities to calculate a total performance opportunity for each branch. Calculate the correlation between this total performance opportunity and the performance metric the bank had been using (75% number of sales per FTE and 25% cross sell ratio). What does this correlation coefficient tell you?
4. Rank all the branches (from 1–253) based on their total performance opportunities. Like for the (A) case, focus your attention only on branches #219, 337, 821, 1482, and 7373. Based on this analysis, classify each of these branches into one of the following four categories: Excellent, Good, Below Average, Poor.
5. Repeat the analyses described in questions #1–4, but this time do the analysis by *branch cluster* (see Column BA), instead of all branches together.<sup>6</sup> Based on this analysis, classify each of the five branches mentioned in question 4 into one of the following four categories: Excellent, Good, Below Average, Poor.
6. Based on what you know now, if you were the president of the Branch Network (Annette Lo), where would you focus your attention? What branches can make the greatest improvements in performance?
7. What should BoD's retail branch management team do now?

### **Case Analysis**

This is a challenging case. A primary purpose of assigning the case is to enable the students to have hands-on experience with the database. But the approach to the teaching of this case will necessarily depend on the quality of the students' preparation of the case and the database analyses. To enhance preparation, this case can be assigned to groups of students. In groups, students with good knowledge in this subject area and those with good Excel skills can help less advanced students. Alternatively, the case can be assigned as a course project, which allows students to spend time on the assignment over a period of weeks and to complete the assignment only at the end of the course when, presumably, they are more expert at performance measurement and evaluation subjects.

In the assignment, students are asked to calculate a number of correlation coefficients. Correlations can be used to judge whether any particular measure or combination of measures (and their weighting) is good or bad. A measure or combination of measures that is highly correlated with value creation is good, or "congruent." But individual measures that are highly correlated with each other are redundant.

Students are also asked to rank branches based on various measures and combinations of measures. This will highlight to them that the choice of measures is important. Performance measures can change markedly depending on what measure(s) are used to form the judgments.

The first part of the student assignment detailed above, that for the (A) case, asks students to focus on the bank's current measurement system. The Question 1 correlations are as follows:

- a. -0.05. This shows that the two measures are assessing different things; they are independent.
- b. The cross sell correlation with total branch profit is 0.27. The sales correlation is 0.36. While neither measure is particularly highly correlated with the best "bottom line" measure available at the branch level, each performance dimension seems to be capturing a meaningful aspect of performance. If students have the Excel skills, they can also be asked to put both of these measures into a multiple regression with branch profit as the dependent variable. If they do so, they will find that the  $R^2 = 0.21$ . So these two measures are "explaining" only about one-fifth of the total variance in branch profits.
- c. 0.26. Achievement of targets on one dimension provides some indication of achievement of targets on the other dimension, but that indication of success is not particularly high.

In Question 2, students must go to columns AF through AI to get the metrics currently in use. Column AF gives the number of actual cross sell/total retail account for each branch. Column AG gives the number of target cross sell/total retail account. Column AH gives the actual number of sales per FTE (full-time equivalents) per day for each branch. Column AI gives the target number of sales per FTE per day. The bonus calculation is weighted 75% by sales per FTE per day and 25% by cross sell/total retail account ratio. Students should calculate an overall score for each branch based on these weights and rank the branches in descending order.

The second part of the assignment, that for the (B) case, asks student to focus on the new, proposed measurement system. The DB3 worksheet shows the solution!\* Column BF shows the percentage customer value mix opportunity and column BG the dollar customer value mix opportunity. Column BC shows the percentage market penetration opportunity and column BH the dollar market penetration opportunity. Column BL shows the percentage retention opportunity and column BM the dollar retention opportunity. As these metrics are not necessarily intuitive, particularly if students were not requested to compute them, they are encouraged to read the case carefully for detailed explanations for these measures. Students are instructed to put equal weights on the two measures in their calculation of the overall score. Branches should be ranked in ascending order.

In the assignment, student groups are asked to calculate three rankings under the different systems and compare the rankings to each other. They are expected to comment on the branches whose rankings seem to change substantively from one system to another.

In class, the instructor can begin with a brief introduction of the case and clarification of some terminology such as cross sell ratio, opportunity metrics, sufficiency metrics, customer

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\* If the instructor does not require the students to do the calculations, he or she can direct the students to the DB3 worksheet, which contains the solutions. Alternatively, if the students are required to do the computations, the instructor should make sure to remove the DB3 worksheet from the database before distributing it.



value mix opportunity, market penetration opportunity, and customer retention opportunity. *Cross sell* was defined as the proportion of customers who purchased products in more than one product category (e.g., loans, deposit accounts, mortgages, credit cards). The *cross sell ratio* was seen as a useful indicator of the effectiveness of the branches' marketing and sales efforts.

*Sufficiency metrics* refer to level of performance that each branch should achieve based on the pre-established targets. Branches are judged to be performing *sufficiently* well if they meet pre-established targets. *Opportunity metrics* reflect the level of performance that each branch should reasonably be able to reach given its size, location, and operating conditions. *Customer value mix opportunity* denotes the profit that would be derived from improving each branch's share of top tier customers to the average of its peers in the same business environment. *Market penetration opportunity* refers to the profit that would be gained from improving each branch's market penetration to the bank-wide penetration rate. Similarly, *customer retention opportunity* refers to the profit that would be gained from improving each branch's customer retention rate to the average of its peers.

An alternative approach to introducing the case is by comparison to the Balanced Scorecard (BSC), a stylized approach to a basket-of-measures system. The BoD case focuses the students on the key issues involved in a baskets-of-measures system, but in a less complex setting.

After the introduction, selected student groups can report their rankings and briefly discuss the branches whose rankings change substantially from one system to another. We have provided the instructor with separate rankings under each system as well as rankings across the three systems sorted by the branch number. Examples of branches that achieve consistently good rankings across all three systems are Branch 322 (8, 1, 1), Branch 600 (52, 1, 1), Branch 645 (37, 1, 1), and Branch 714 (31, 1, 1). Examples of branches whose rankings change dramatically from one system to another are Branch 840 (224, 1, 1), Branch 923 (234, 110, 1), Branch 992 (41, 102, 218), Branch 6254 (1, 180, 88), and Branch 7714 (9, 251, 249). Examples of branches that rank poorly under all three systems are Branch 541 (200, 232, 224), Branch 568 (203, 237, 230), Branch 1295 (240, 240, 248), and Branch 1854 (244, 239, 250). The instructor should guide the discussion and highlight the key differences among the three systems. This presentation and discussion will take about 30 minutes. The instructor can also briefly talk about the case of Branch 821 to emphasize the point.

The instructor can then guide the students to answer some of the assignment questions. The students should be able to evaluate the proposed system, understand the advantages and disadvantages of the two systems and anticipate certain implementation issues.

Finally, the instructor can conclude by asking the students if the CEO of BoD should implement the proposed system or not, and if yes, what should be done to accomplish a smooth implementation.

Some issues that might be raised in class:

*What are the differences between the opportunity metrics and sufficiency metrics?*

*Sufficiency metrics* are primarily extrapolations from the past. The branches are judged by the extent to which they meet pre-established targets. However, such metrics are heavily influenced by performance in the past. For example, large performance increases in the current year relative to the past year might only indicate low starting points. *Opportunity metrics* reflect

the level of performance that each branch should reasonably be able to reach given its size, location, and operating conditions.

The concept of *opportunity metrics* is closely related to the notion of *relative performance evaluation* (RPE). RPE refers to the concept that employees' performance are evaluated not in terms of their absolute levels of results, but in terms of their results relative to each other or relative to their closest outside competitors. For RPE to be legitimate, all parties in the comparison group must be performing roughly the same tasks and facing the same business conditions.

In this case, the 10 clusters were determined by the mix of consumer segments as well as some balance sheet and transaction characteristics. Consumer characteristics include consumer demographics, consumer product/service mix, and their profit potentials to the bank. The branch clustering was important because branch performances could be compared only with the performances of other BoD branches facing roughly the same business environment. The branch performance standards were based on the current performance of the average branch in each cluster.

*Evaluate and compare the existing and proposed system based on the following measurement criteria: congruence, understandability, controllability, and precision. Would you recommend the CEO of BoD change to the proposed system? Why or why not?*

### Congruence with firm value

Congruence means that the performance measures will indeed lead to the achievement of the intended organizational objectives, that is, most generally, the creation of firm value. In this case, *firm value* is (imperfectly) proxied by *branch profit*.

Under the current performance measurement system, the two performance metrics, number of both product sales and cross sell ratio, are both positively correlated with branch profit ( $r = 0.36$  and  $0.27$  respectively). A multiple regression analysis also indicates that both measures have significant impact on branch profit ( $R^2 = 0.21$ ). The correlation between the number of product sales and the cross sell ratio is  $-0.05$ , which indicates that these two metrics measure *independent* dimensions of performance (see also **Exhibit TN-1**, Slides 5–6).

Under the proposed system, both market opportunity and retention opportunity are positively correlated with branch profit ( $r = 0.42$  and  $0.06$  respectively). However, the correlation between retention opportunity and profit is rather low. In a multiple regression, market opportunity is significantly related to branch profit whereas retention opportunity is not. (The  $R^2$  of this regression is  $0.20$ .) Market opportunity and retention opportunity are positively correlated ( $r = 0.43$ ), which indicates that these metrics do not measure independent dimensions of performance, but instead exhibit considerable overlap (see also **Exhibit TN-1**, Slide 7).

These statistics seem to suggest that the current performance measurement system is more congruent with firm value as proxied by branch profit.

### Controllability

Controllability means that the managers should be able to influence the performance measures through their actions, or that the performance measures do not include effects on performance that are largely outside the managers' control. At first sight, the current

performance metrics appear more controllable by the manager than the opportunity metrics since the branch managers have no control over the performance of their peers.

On the other hand, the performance of peers tells the performance evaluator something about the environment, such as about the economic and competitive conditions they faced. Thus, the use of opportunity metrics, or RPE, helps buffer managers partially from uncontrollable influences by filtering out common noise and focusing on the true differences that are generated by the managers' efforts.

### Understandability

The current performance metrics are more conventional and easier to understand than the proposed opportunity metrics. One reason is that market and retention opportunities are defined in more aggregate terms than number of sales or cross sell ratio. Managers may not know the exact procedures to follow to achieve high market penetration or retention. In contrast, actions for increasing the number of sales or cross sell ratio can be easily determined.

### Precision

Precision refers to the accuracy with which a given quantity can be measured. As the opportunity metrics depend heavily on the accuracy of clustering, they are subject to more errors than the current measures.

To summarize, the current performance measures seem to be better than the proposed performance measures in terms of congruence, understandability, and precision. However, the proposed performance measures are perhaps superior to the current performance measures in terms of filtering out uncontrollable factors and focusing on the conditionally controllable factors.

*How do the rankings for the five branches differ under the different performance measurement alternatives? How does this affect the allocation of bonuses/incentives?*

The current bank performance metrics and the proposed performance metrics are negatively correlated ( $r = -0.16$ ). In other words, branches performing well according to the current metric have slightly lower opportunity, but the correlation is low (see **Exhibit TN-1**, Slide 10). Rankings and ratings under the two systems are as follows for Branches 219, 337, 821, 1482, and 7373 (see also **Exhibit TN-1**, Slides 11–13).

<i>Branch</i>	<b>Current System</b> (75% Sales 25% Cross Sell)		<b>Proposed System</b> (Overall sample opportunity)		<b>Proposed System</b> (Cluster-based opportunity)	
	<i>Rank</i>	<i>Rating</i>	<i>Rank</i>	<i>Rating</i>	<i>Rank</i>	<i>Rating</i>
219	102	Good	226	Poor	193	Below Average/Poor
337	184	Below Average	207	Poor	143	Below Average
821	72	Good	49	Excellent	236	Poor
1482	24	Excellent	190	Below Average/Poor	127	Below Average
7373	51	Excellent	146	Below Average	123	Below Average

Notes:

- 1) The four ratings (Excellent, Good, Below Average, and Poor) correspond to the four quartiles.  $253 \text{ branches} / 4 = 63$  (1–63 = Excellent; 64–126 = Good; 127–189 = Average; 190–253 = Poor).
- 2) For some branches, rankings change dramatically when switched to the proposed performance measurement system. These rankings directly impact ratings and subsequent awards of bonuses. For example, the manager of branch 7373 would receive a bonus ranging from 10–50% of the base salary under the old system but no bonus under the proposed system.

*What should the bank managers do now?*

If they follow the opportunity metrics analysis all the way through, most students will probably be convinced that the bank's managers should implement the new approach. It promises to provide better evaluations, better focusing of attention, and better decision-making.

However, students should also understand that any of a number of problems might arise from the implementation of the proposed system. First, bonus plans will have to be changed. Under the current system, bonuses were paid to branch personnel based on their percent achievement of targets for the number of product sales per FTE (weighted 75%) and cross sell/total retail accounts ratio (weighted 25%). No bonuses were paid on performance dimensions where performance was below target. Under the proposed system, bonuses will be paid to branch managers if their branches are above average when compared to their peers. If branches have positive opportunities, the managers will not receive bonuses because they did not realize their potential. Change of bonus plans may cause confusion and conflict.

Second, managers may complain about the accuracy of the clustering. Since there are no objective criteria for clustering, even if the clustering is well done, managers may argue with the clustering, if for no other reason than to protect themselves. The absence of objective criteria makes it hard for executives to justify each and every clustering decision to the managers. The clustering also needs to be updated periodically, as branches grow and neighborhoods change.

Third, managers may complain about the product cost data underlying these analyses. If the product cost data are wrong, then all of the analyses following the use of those data are questionable. Is the bank's cost accounting system adequate for the purposes for which its data are being used?

Fourth, when the opportunity is zero or negative, what would executives tell the branch managers to do? It would be difficult for executives to point out areas for improvement for the above-average branches. At some point in the implementation process, the "bar" defining achievable performance needs to be moved up.

And finally, one weakness in this system is that the benchmarks are entirely internal. If the company as a whole is doing better than the industry in general, managers may feel unfairly penalized for having positive "opportunities" compared to their peers in the same company.

## Pedagogy

This case lends itself to different uses. It can be assigned as a student term project, or it can be used to form the basis of discussion in either one or two class sessions.

In a single 75-minute class, we suggest a time plan like the following:

- 10 min. Talk about the company and introduce the proposed measurement system including an explanation of difficult concepts.
- 30 min. Different rankings of branches under the three different performance measurement systems. Highlight the branches whose rankings change dramatically across the three systems. What causes the differences? What is closest to the “truth”?
- 25 min. Evaluate the proposed system and discuss the advantages and disadvantages of the two systems.
- 10 min. Talk about the implementation issues. Discuss the CEO’s decision.

## Endnotes

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<sup>1</sup> The Excel instruction for the calculation of a correlation coefficient is: CORREL(ARRAY1, ARRAY2) [under the “fx” button in the toolbar of the Insert>Function menu].

<sup>2</sup> Step 1: Calculate the percent achievement of the cross sell/total retail accounts target [Column AF ÷ Column AG].

Step 2: Calculate the percent achievement of the number of sales per FTE per day target [Column AH ÷ Column AI].

Step 3: Calculate the correlation coefficient between the two percent-achievement figures.

<sup>3</sup> Step 1: Calculate a weighted bonus score for each branch with the following formula:

Weighted score = 0.75 \* percent achievement of the number of sales per FTE per day (IF GREATER THAN ONE, OTHERWISE 0) + 0.25 \* percent achievement of the cross sell/total retail accounts ratio (IF GREATER THAN ONE, OTHERWISE 0).

Hint: Use the IF function in Excel. Let X = percent achievement of the number of sales per FTE per day, and Y = percent achievement of the cross sell/total retail accounts ratio, then Weighted Score = IF(X>1, 0.75X, 0) + IF(Y>1, 0.25Y,0).

Step 2: Rank the branches based on the figure from Step 1. Rank in the following order: first on the figure obtained in Step 1; second on the measure with the 75% weighting; and third on the measure with the 25% weighting.

Hint: Select data, go to DATA on the toolbar in Excel, go to SORT, and sort first by the figure obtained in Step 1 in descending order, and then, just to rank the ties, sort by the measure with the 75% weighting in descending order, and then by the measure with the 25% weighting in descending order.

<sup>4</sup> A) Calculation of Market Penetration Opportunity:

Dollar Market Penetration Opportunity = % Market Penetration Opportunity (Column BC) \* Total number of HH served (Column Z) \* Average profit per HH (Column AB)

B) Calculation of Customer Value Mix Opportunity:

Step 1: Calculate the average percentage of households in the top two tiers across all the branches. (=AVERAGE(Column AU)).

Step 2: Calculate the benchmark for each branch by taking the maximum of the average percentage of households in the top two tiers and the actual percentage of households in the top two tiers for each branch.

$$\text{Benchmark} = \text{MAX}(\text{AVERAGE}(\text{Column AU}), \text{Column AU})$$

Step 3: Calculate the percentage customer value mix opportunity by subtracting the actual percentage of households in the top two tiers for each branch from the benchmark.

$$\% \text{ Customer Value Mix Opportunity} = \text{Benchmark} - \text{Column AU}$$

Step 4: Calculate the dollar amount of customer value mix opportunity using the following formula:

$$\text{Dollar Customer Value Mix Opportunity} = \% \text{ Customer Value Mix Opportunity} * \text{Difference in customer profitability in top two tiers and in bottom two tiers (Column AT)} * \text{Total number of HH served (Column Z)}$$

C) Calculation of Market Opportunity:

$$\text{Dollar Market Opportunity} = \text{Dollar Market Penetration Opportunity} + \text{Dollar Customer Value Mix Opportunity}$$

<sup>5</sup> Step 1: Calculate the average percentage of retention across all the branches. (=AVERAGE(Column AV))

Step 2: Calculate the benchmark for each branch by taking the maximum of the average percentage of retention and actual percentage of retention for each branch.

$$\text{Benchmark} = \text{MAX}(\text{AVERAGE}(\text{Column AV}), \text{Column AV})$$

Step 3: Calculate the percentage retention opportunity by subtracting the actual retention percentage from the benchmark.

$$\% \text{ Retention Opportunity} = \text{Benchmark} - \text{Column AV}$$

Step 4: Calculate the dollar amount of retention opportunity using the following formula:

$$\text{Dollar Retention Opportunity} = \% \text{ Retention Opportunity} * \text{Total number of HH served (Column Z)} * \text{Profit per HH (Column AB)} * 3$$

<sup>6</sup> Step 1: Calculate the dollar amount of market penetration opportunity using the following formula:

$$\text{Dollar Market Penetration Opportunity} = \% \text{ Market Penetration Opportunity (Column BC)} * \text{Total number of HH served (Column Z)} * \text{Average profit per HH (Column AB)}$$

Step 2: Sort the branches by the subsegment that each branch belongs to (Column AW).

Step 3: Calculate the average percentage of households in the top two tiers across the branches *in the same subsegment*.

Step 4: Calculate the benchmark for each branch by taking the maximum of the average percentage of households in the top two tiers in the subsegment and the actual percentage of households in the top two tiers for each branch.

$$\text{Benchmark} = \text{MAX}(\text{AVERAGE}(\text{Column AU}), \text{Column AU})$$

Step 5: Calculate the customer value mix opportunity by subtracting the actual percentage of households in the top two tiers for each branch from the benchmark.

$$\% \text{ Customer Value Mix Opportunity} = \text{Benchmark} - \text{Column AU}$$

Step 6: Calculate the dollar amount of customer value mix opportunity using the following formula:

$$\text{Dollar Customer Value Mix Opportunity} = \frac{\% \text{ Customer Value Mix Opportunity} * \text{Difference in HH profitability in top two tiers and in bottom two tiers (Column AT)}}{\text{Total number of HH served (Column Z)}}$$

- Step 7: Calculate the average percentage of retention across all the branches *in the same subsegment*.
- Step 8: Calculate the benchmark for each branch by taking the maximum of the average percentage of retention in the subsegment and actual percentage of retention for each branch.  
Benchmark = MAX((AVERAGE (Column AV), Column AV))
- Step 9: Calculate the percentage retention opportunity by subtracting the actual retention percentage from the subsegment benchmark.  
% Retention Opportunity = Benchmark – Column AV
- Step 10: Calculate the dollar amount of retention opportunity using the following formula:  
Dollar Retention Opportunity = % Retention Opportunity \* Total number of HH served (Column Z) \* Profit per HH (Column AB) \* 3
- Step 11: Add the three opportunity figures together to get total cluster-based performance opportunity for each branch and rank the branches accordingly.

## Bank of the Desert

### Teaching Note

#### Appendix

#### Description of Contents of the Bank of the Desert Database

The Bank of the Desert databases provide detailed financial and operational information for each branch of the bank. The Bank has 253 branches in total, each of which is represented by a row in the spreadsheets (from row 4 to row 256). The following table provides descriptions for each column in the DB1 worksheet.

**Table 1**  
**Column Descriptions for DB1 Worksheet**

Column Reference	Column Description
A	Branch number
<b>Accounts and Cross Sell</b>	
B	Number of years the branch has been in operation
C	Total deposit balances
D	Number of retail accounts
E	Number of non-retail accounts
F	Number of cross sell accounts, i.e., accounts that belong to customers with more than one account with the Bank of the Desert
<b>Counts of Major Product Categories</b>	
G	Number of ATM/Debit accounts
H	Number of checking accounts

*Professors Kenneth A. Merchant, Wim A. Van der Stede, and research assistant Xiaoling (Clara) Chen prepared this case as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.*

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<b>Column Reference</b>	<b>Column Description</b>
I	Number of savings accounts
J	Number of loan accounts
K	Number of non-interest-bearing (NIB) accounts
L	Number of other miscellaneous accounts
<b>Balances of Major Product Categories</b>	
M	Balance of ATM/debit accounts
N	Balance of checking accounts
O	Balance of savings accounts
P	Balance of non-interest-bearing (NIB) accounts
Q	Balance of other miscellaneous accounts
R	Balance of loan accounts
<b>Profit from Major Product Categories</b>	
S	Profit from ATM/debit accounts
T	Profit from checking accounts
U	Profit from savings accounts
V	Profit from non-interest-bearing (NIB) accounts
W	Profit from other miscellaneous accounts
X	Profit from loan accounts
Y	Total profit from retail customers
<b>Customer Information</b>	
Z	Number of households that each branch currently serves
AA	Average number of sales per household
AB	Average profit per household
AC	Average number of retail accounts per household
AD	Average number of accounts during the year
AE	Number of full-time equivalents (FTEs)
<b>Current Performance Measures</b>	
AF	<b>Actual</b> Cross Sell / Total Retail Accounts ratio, i.e., the number of cross sell accounts (accounts owned by customers with more than one account with the Bank) divided by the total number of retail accounts
AG	<b>Target</b> Cross Sell/Total Retail Accounts ratio
AH	<b>Actual</b> number of sales per full-time equivalents (FTE) per day
AI	<b>Target</b> number of sales per full-time equivalents (FTE) per day

**Table 2**  
**Column Descriptions for Columns Added in DB2 Worksheet**

<b>Column Reference</b>	<b>Column Description</b>
<b><i>Customer Profitability Information</i></b>	
AJ	Number of households with negative profitability
AK	Profit from households with negative profitability
AL	Number of households with moderate profitability
AM	Profit from households with moderate profitability
AN	Number of households with excellent profitability
AO	Profit from households with excellent profitability
AP	Number of households with outstanding profitability
AQ	Profit from households with outstanding profitability
AR	Profit per household in the top two tiers, i.e., the households with excellent profitability or outstanding profitability
AS	Profit per household in the bottom two tiers, i.e., the households with potential profitability or moderate profitability
AT	Difference in the profit per household between the top and bottom two tiers
<b><i>Opportunity Metrics Information</i></b>	
AU	Percentage of households in the top two tiers, i.e., the number of households with excellent profitability and those with outstanding profitability divided by the total number of households that each branch serves
AV	Customer retention percentage
<b><i>Cluster Information</i></b>	
AW	Cluster code
AX	Cluster name
<b><i>Market Area Information</i></b>	
AY	Market area number
AZ	Number of households in the market area
BA	Market area penetration rate
BB	Bank-wide penetration rate
BC	Market penetration opportunity (Column BB – Column BA)



## Fine Harvest Restaurant Group (A) and (B)

### Teaching Note

#### *Purpose of Case and Suggestions for Use*

The Fine Harvest Restaurant Group cases A and B focus on issues related to selecting performance measures and setting performance targets. The cases are supported by databases, obtained from a real company, that provide multiple opportunities for analyses using Excel or any statistical package. The assignment questions encourage the students to use relative performance evaluations in like-entity clusters in considering the performance evaluations used to determine the managers' bonuses.

The required analyses are complex. The assignment questions provide detailed instructions for performing the analyses using Excel, but obviously the analyses can be done using any statistical package with which the students are familiar. Instructors of students who are well skilled in data analyses can delete the detailed sets of instructions from the assignments. In general populations of students, because weaker students might still get lost in the assignment, it is probably best to assign these cases as a group project. Our experience has shown that students learn a lot from each other in the group experience, and all get a good sense of accomplishment after they have completed the assignments.

The case setting is a chain of restaurants. Fine Harvest had traditionally evaluated restaurant managers based on store margins and had not given enough consideration to the performance potential that the stores had when setting targets. In response to several restaurant managers' complaints that the performance evaluation system was unfair and incomplete, the top executives of the company hired a consultant to revise the measures and targets used to evaluate performance. The new performance evaluation plan aimed to (a) account for different drivers of performance at the restaurant level; and (b) assess the performance of each restaurant relative to a peer group operating under similar conditions. Students are provided with detailed databases that they can use to compare the evaluations of the restaurants under the existing and proposed system. In many cases, those evaluations are dramatically different.

The case was designed to illustrate the importance of setting the right performance targets. Performance targets are an integral part of a financial results control system. They provide a basis for performance evaluations and have significant impact on employee

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*Professors Kenneth A. Merchant, Tatiana Sandino, Wim A. Van der Stede, and research assistant Clara (Xiaoling) Chen prepared this note as an aid for instructors using the Fine Harvest Restaurant Group case.*

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motivation. This case highlights the difficulty of setting the right performance targets for a large number of stores within a big corporation that operates in diverse business environments.

The case underscores the point that performance evaluations of different stores depend upon the performance targets assigned to them to a large extent. The students should understand that there are multiple ways of setting performance targets for any given organization and management should choose the target-setting system carefully.

In this case, students should go beyond understanding the two target-setting and performance-measurement systems and start to think about the advantages and disadvantages of the two systems. Students are required to work with the database to develop hands-on experience with the “opportunity metrics.” The ranking exercise should make it clear to the students that different methods of target setting yield vastly different evaluation outcomes for the restaurant managers.

Through evaluation of the different systems, students should understand that neither of the methods described in the cases is perfect and that choice of a target-setting and performance measurement system ultimately depends on the settings. Students are encouraged to explain how differences in the settings could alter the determination of performance targets and, hence, the performance rankings. Finally, the students should also think about the implementation issues that the company would face if it decided to adopt the proposed budgeting and performance measurement system.

### **Suggested Assignment Questions**

#### **Questions for (A) case:**

1. What are the main strengths and weaknesses of the Fine Harvest Restaurant Group’s existing target-setting process and performance measurement system?
2. Using the data in the DB(A) worksheet in the Fine Harvest database, examine the distribution of the Store Margin Targets, the Store Margin Actual Results, and the % Achievement of Store Margin Target.<sup>1</sup>

Do these distributions tell you anything about the quality of the targets?

3. In what other ways can you assess whether the targets are set optimally?
4. What changes do you suggest to improve the existing system?

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<sup>1</sup> To examine the distribution of each of these variables you can use two functions in the Data Analysis tool displayed under the Data Tab:

(a) Select Histogram under Data Analysis and click OK. Enter the range of values (e.g., A3:A248) for the measure of interest under “Input Range,” select “New Workbook Ply” and “Chart Output.” Then click OK. A table will appear with different bins equally distanced among themselves and the frequency of values for each bin, as well as a chart illustrating the distribution of values of the measure.

(b) To obtain mean, median, standard deviation, minimum and maximum values, select Descriptive Statistics under Data Analysis and click OK. You can obtain these statistics for several measures at a time (as long as they are arranged in adjacent columns) by including both the values of the measures and their headings under the “Input Range” and selecting “Labels in first row.” Click OK.

**Questions for (B) case:**

1. Using the data in the DB(B) worksheet in the Fine Harvest database, calculate the correlations between:<sup>2</sup>

*Note: Be careful to not include the row for "totals" as an observation in your analysis.*

- a. The three performance measures that are included in the proposed incentive system: average meal profit (column H in the database), drinks per meal (column L), and labor hours per meal (column P);
  - b. The performance measure included in the current incentive system, that is, profit margin (column E), and the three performance measures that are included in the proposed incentive system: average meal profit (column H in the database), drinks per meal (column L), and labor hours per meal (column P);
  - c. Each of the three performance measures included in the proposed incentive system and the location's 3-month profit contribution (column U); and
  - d. The performance measure included in the current incentive system, that is, profit margin (column E) and the location's 3-month profit contribution (column U).
  - e. What do these correlations tell you?
2. Use regression analyses to learn how some of the relevant variables are related:<sup>3</sup>
    - a. Regress the restaurant's 3-month profit contribution (column U) on the three performance measures included in the proposed incentive system: average meal profit (column H), drinks per meal (column L), and labor hours per meal (column P), controlling for the number of meals.

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<sup>2</sup> To obtain correlations between two or more measures do the following:

(a) In a separate worksheet, copy and paste the name and values for all of the measures that you want to correlate with each other in adjacent columns.

(b) Under the Data Tab select Data Analysis. Select Correlation and click OK. Enter the range of values of all the measures of interest including a first row specifying the names of the measures (e.g., A2:B248) under "Input Range", select "Labels in First Row" and "New Workbook Ply." Then click OK. A table will appear with the correlations among all the measures selected. Roughly speaking, correlations between -0.3 and 0.3 are considered to be weak, correlations between 0.3 and 0.7 (or if negative, between -0.7 and -0.3) are considered to be moderate, and correlations greater than 0.7 (or if negative, lower than -0.7), are considered to be strong.

<sup>3</sup> To regress a dependent variable on a number of explanatory measures do the following:

(a) In a separate worksheet, copy and paste the name and values of the dependent variable and the explanatory measures of interest in adjacent columns.

(b) Under the Data Tab select Data Analysis. Select Regression and click OK. Enter the range of values of the dependent variable under "Input Y Range" and the range of values of the explanatory variables under "Input X Range." Include the name of each measure in the first row of both ranges and select "Labels." Then click OK.

- b. Regress the restaurant's 3-month profit contribution (column U) on the performance measure included in the current incentive system, that is, profit margin (column E), and the number of meals.
- c. What do these regressions tell you? Are the signs of the coefficients on the performance measures consistent with expectations? How much variance in the profit contribution do the performance measures of each of the incentive systems account for?
- d. Are the proposed metrics good? How do they compare with the current metric used to evaluate performance?

To answer this question, consider different criteria such as controllability, understandability, precision and bias, cost, and strategic guidance.

3. What are the three criteria used for clustering? What should these criteria capture? What would happen if the clustering was not done well?
4. Examine whether the clustering was done properly.
  - a. Summarize cluster information: How many restaurants were included in each of the clusters? What are the mean and standard deviation values of the profit contribution (column U), store margin measure (column E), and the three performance measures included in the proposed incentive system (columns H, L, and P)?<sup>4</sup>
  - b. Use the data to examine whether the consultants' claim that "the ten clusters differed significantly on at least one or more of the key performance dimensions" was right. To achieve this, regress each of the three performance measures included in the proposed incentive system (columns H, L, and P) on indicator variables representing each of the clusters. For your convenience, cluster indicator variables have been included on the last 10 columns of the Worksheet DB(B).<sup>5</sup> How much of the variance in each performance measure is explained by the clusters?

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<sup>4</sup> To obtain these statistics do the following:

- (a) In a separate worksheet, copy and paste the name and values of the columns Cluster Name (column D), and the measures of interest: profit contribution (column U), store margin measure (column E), and the three performance measures included in the proposed incentive system (columns H, L, and P).
- (b) Sort the dataset in the new worksheet by cluster name, and insert the row with the names of the measures multiple times, at the top of each new cluster.
- (c) Analyze the values of each cluster separately. To obtain mean, median, standard deviation, minimum and maximum values, select the Data tab, select Data Analysis, select Descriptive Statistics, and click OK. You can obtain these statistics for the measures of each of the clusters by including both the values of the measures and their headings under the "Input Range" and selecting "Labels in first row". Click OK.

<sup>5</sup> Follow the instructions in footnote 3 on how to run regressions.

*Note:* When you regress a dependent variable on a constant and a set of indicator variables created from a nominal variable (such as Cluster name), you need to exclude one of the indicator variables from the regression and treat this indicator as the baseline. The coefficients on all the other indicator variables included in the regression are then interpreted relative to the baseline indicator. For example, you can exclude the "Downtown Eat In Dining" indicator from the regression and treat it as the baseline. The coefficient on any of the Cluster indicator variables included in the regression (e.g., the "Drive Thru,

- c. Along the same lines, regress the performance measure of the current incentive system (profit margin, column E) on dummy variables representing each of the clusters. How much of profit margin variance is explained by the clusters?
  - d. What do the regressions described above tell you about the clustering proposed by the consultant?
  - e. What other ways can you think of to test whether the clustering was done properly? What is your overall assessment of the clustering criteria and the clusters selected?
5. Rank the locations based on different performance standards:
- a. Rank all the locations (from 1 to 246) based on their % achievement of profit margin target (column G). Provide ratings for each location based on these rankings by classifying each of the 246 locations into one of four quartiles: Excellent, Good, Below Average, Poor.
  - b. Rank all the locations (from 1 to 246) based on their total profit opportunity (Column T) and the total profit opportunity per meal (Column W).<sup>6</sup> For each measure, provide ratings for each location based on these rankings by classifying each location into one of the following four quartiles: Excellent, Good, Below Average, Poor.
  - c. Calculate the correlation between the total profit opportunity per meal (column W) and the performance metric the restaurant had been using, that is, % achievement of profit margin target (column G). What does this correlation coefficient tell you?
6. Several restaurant managers were directly engaged in the consulting project. Their inputs were taken into consideration to determine, particularly, the elements of performance that were controllable. Among those managers, five were particularly eager to learn what their ratings would be under the consultant's proposed system. They included the managers of restaurants 006, 170, and 235, who had previously complained that their performance evaluations were unfair, and the managers of restaurants 137 and 153 who were applying to be promoted as regional managers.
- a. In a table, summarize the results for each of these five restaurants based on the current performance evaluation measure (% achievement of profit margin target) and for the proposed performance evaluation measure (consider both the total profit opportunity and total profit opportunity per meal). In each case, provide the value of the performance measure, the ranking, and the rating.
  - b. What does this table tell you about the managers' performances? Were the managers right in claiming that they were evaluated unfairly? Would you consider for promotion the two managers that applied for regional manager positions?

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Mature" indicator), will show the effect of belonging to the cluster represented by that indicator (e.g., the "Drive Thru, Mature" cluster) rather than the "Downtown Eat In Dining" cluster, on the dependent variable.

<sup>6</sup> Column T gives the total dollar profit opportunity for each location, which is a summation of the total meal profit opportunity (column K), total drinks incidence profit opportunity (column O), and total labor cost savings opportunity (column S). Total profit opportunity per meal (Column W) is calculated by dividing the total dollar profit opportunity by the location's number of meals (Column X).

7. Karen had to make a decision on whether to implement the proposed performance evaluation system. Would you recommend to her that she keep the old performance measurement system, implement the new system, or find a hybrid solution?
  - a. Discuss advantages and disadvantages of each system.
  - b. Describe your final proposition and explain the rationale behind it.
  - c. How would you implement your proposed performance measurement system? Or, if you decided to keep the current system, how would you explain your decision to the consultants and to the store managers that had been interviewed during the process?
  - d. Provide a brief description of how you would propose to determine the bonus payouts based on the performance measure(s) used in your proposal.
  - e. If you were Karen, how would you communicate your decision to the restaurant managers (and in particular to the managers of restaurants 006, 170, 235, 137, and 153)?

### ***Discussion***

The following sections provide answers to the questions posed in the assignment.

#### **(A) Case**

##### **A1. Strengths and weaknesses of current system**

Strengths:

- Considers both historical data as well as forward-looking data.
- Easily understood. Simple and has been in place for most of the company's history. Seemed to have worked for a while.
- Excludes shared expenses and those affected by decisions made by upper management (mostly uncontrollable) from the calculation of individual restaurant profit.
- Aligns each restaurant's performance with that of the company (12% growth).
- Focus on growth.
- Inexpensive.

Weaknesses:

- Does not take store type into consideration in evaluations. Some targets are too challenging and some too easy.
- Not trusted by some managers. Perceived unfairness. Harm motivation?
- Top-down target-setting. Can upper management set realistic targets for 246 stores?

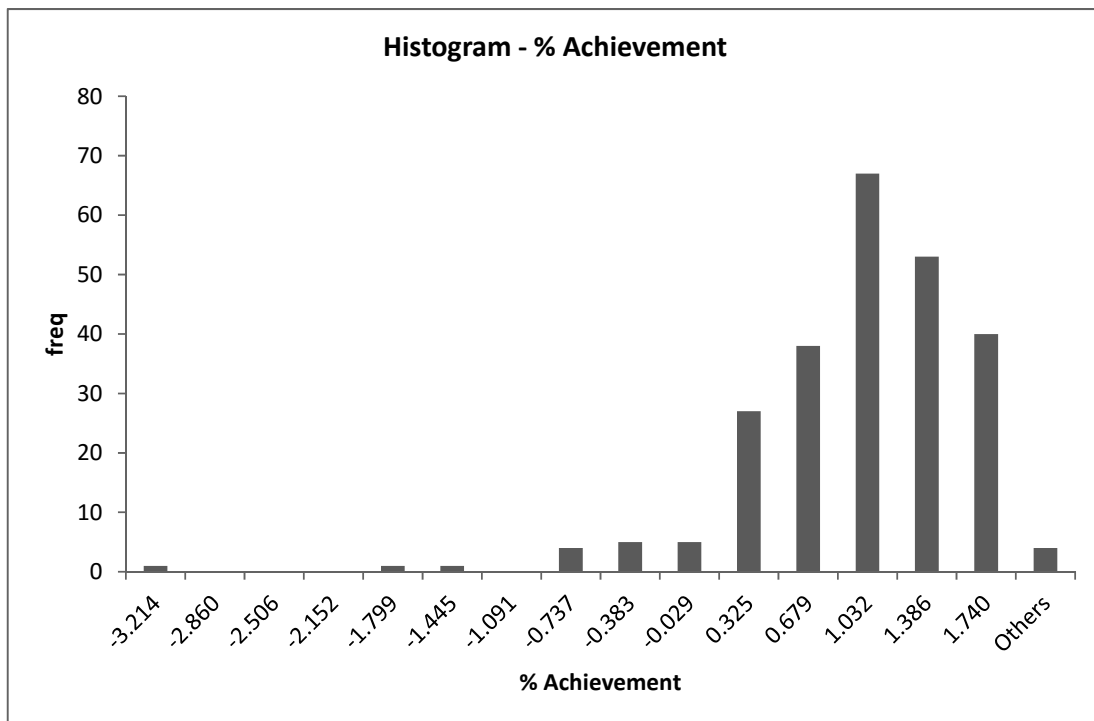


- Too focused on profit margin growth. Cannot sustain a growth rate of 12% indefinitely. Growth tapers off over time.
- Not flexible. Does not allow subjectivity even in extraordinary situations.
- Caps on bonuses might induce game-playing.

## A2. Distributions of targets, actuals, and achievement of targets

The histogram of % achievement is shown below.

- The targets are, on average, higher than the actual results. The average target profit margin achievement ratio is only 81%. 100% achievement is necessary to earn a bonus. Thus, more than half (58%) of the restaurant managers are unable to achieve their target, and are therefore unable to get a bonus. Some managers (e.g., those achieving 50% of the target or less) may be demotivated and completely give up on the task.
- More importantly, the distributions of the target and the actual profit margins look very different. The targets are set very close around the mean, perhaps due to an assumption that most restaurants can achieve similar store margins. However, the actual store margins vary through a much wider range across restaurants. The standard deviation of the targets is 0.028. For the actuals, it is 0.133. There are significant actuals outliers on the negative side.
- There is a high variance in percent achievement. It seems that the targets are too challenging for some restaurants in the left tail of the distribution and too easy for the restaurants on the top quartile of the distribution.



**A3. Other ways to assess whether targets are set optimally?**

Could examine:

- Point in the year when the restaurants made their targets. Early means easy.
- Peer group target achievement.
- Percentage of restaurants that achieve their targets year after year.

**A4. Recommended changes**

Many possibilities, including:

- More bottom-up input in target-setting.
- Use a more diverse set of metrics. More granular. More controllable by managers.
- Use comparisons to other equivalent locations.
- Increase review frequency to adjust “unreachable targets” for the remainder of the year.
- Allocate bonuses quarterly to increase the sense of urgency and the timeliness of payment.
- If targets are not changed, change the bonus structure to allow more managers to earn bonuses.
- Tie bonuses to corporate performance to induce cooperation between restaurants and smooth bonus payments.
- Allow some subjectivity. Of course, that creates its own set of challenges (e.g., maintaining fairness).

**(B) Case**

**Question 1: Correlations**

**a. and b. Correlations between the three metrics and with profit margin**

	<i>Metric1_Avg meal profit—Actual</i>	<i>Metric2_Drinks per meal—Actual</i>	<i>Metric3_Labor hrs per meal—Actual</i>	<i>Profit margin</i>
Metric1_Avg meal profit—Actual				
Metric2_Drinks per meal—Actual	0.17*			
Metric3_Labor hrs per meal—Actual	-0.11	-0.35*		
Profit margin	0.03	0.29*	-0.72*	

c. **Correlations with 3-month profit contribution**

	<i>Metric1_Avg meal profit—Actual</i>	<i>Metric2_Drinks per meal—Actual</i>	<i>Metric3_Labor hrs per meal—Actual</i>	<i>3 Month Profit Contribution</i>
Metric1_Avg meal profit—Actual				
Metric2_Drinks per meal—Actual	0.17*			
Metric3_Labor hrs per meal—Actual	-0.11	-0.35*		
3 Month Profit Contribution	0.10	0.31*	-0.65*	

d. **Correlation between profit margin and 3-month profit contribution**

It is .83. No surprise here. They are measuring essentially the same thing. The 3-month number smoothes out some monthly fluctuations.

e. **Meaning of the correlations**

- The correlations between the three measures are relatively low. This is good—they are not redundant.
- Drinks are profitable. They contribute to overall profits.
- Labor hours is also important. Better managing labor costs would bring in more profits.

**Question 2: Regressions**

a. and b. **What causes 3-month profit contribution and analysis of the old system?**

VARIABLES	3-month profit contr.	3-month profit contr.	3-month profit contr.
Avg. Meal Profit	8,350 (25,882)	3,904 (10,481)	
Drinks per meal	30,101* (16,878)	4,464 (6,873)	
Labor hrs. per meal	-1,320,184*** (111,422)	-122,120*** (56,551)	
# meals		2.948*** (0.0839)	2.428*** (0.0786)
Profit Margin			98,003*** (8,778)
Constant	162215 (110,291)	57,384 (45,096)	-50,207*** (2,190)

Observations	246	246	246
R-squared	0.429	0.907	0.937

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**c. The three proposed measures provide a significant explanation of 3-month profit contribution**

Interpretation of the results

- R<sup>2</sup> high in both regressions
- The metrics of the proposed system might be more meaningful. Two of the metrics in the proposed system are statistically significant—labor hours per meal and, to a lesser extent, drinks per meal.
- One concern is regarding the costs of measuring each of these metrics. Would the benefits justify the costs?

**d. Evaluation of the metrics**

- Strategic guidance—better with more granularity in measures.
- Controllability—also better with more detailed measures. However, much improved if effective clustering could be accomplished.
- Accuracy (precision and lack of bias)—these measures can be measured relatively precisely, although some recording errors might be made. Bias does not seem to be a problem.
- Cost—the costs of tracking the new measures should not be very high.
- Timeliness—slightly better with the operational measures.
- Understandability—the old system is simpler, and change is hard.

One issue that students might usefully discuss is the fact that number of meals is treated as uncontrollable in the proposed system. Does that make sense? Surely there are things the store manager can do to affect number of meals sold—customer service, store cleanliness, food quality, etc. These are ideas for enriching the system.

**Question 3: Clustering**

Three criteria: (1) type of venue, (2) stage of development, (3) dining style. The purpose is to create relatively homogeneous groupings to improve performance evaluations—evaluate restaurants.

**Question 4: Was the clustering done properly?**

**a. Summarize cluster information**

The number of restaurants in each cluster varies significantly, from 4–64.

Cluster Name	Downtown Eat In Dining	Downtown Mixed Dining	Drive Thru, Developing	Drive Thru, Mature	Drive Thru, New	Nontraditional	Shopping Mall Eat In Dining	Shopping Mall Mixed Dining	Strip Mall Eat In Dining	Strip Mall Mixed Dining
Observations	8	6	33	51	4	19	64	10	38	13
<b>Store Margin - Actual</b>										
mean	20.7%	10.1%	15.2%	18.8%	-15.3%	12.6%	19.5%	22.2%	14.4%	24.0%
std	0.032	0.158	0.140	0.101	0.317	0.177	0.113	0.094	0.117	0.069
<b>Avg meal profit - Actual</b>										
mean	\$4.2	\$4.278	\$4.182	\$4.194	\$4.193	\$4.108	\$4.267	\$4.248	\$4.269	\$4.223
std	0.041	0.060	0.083	0.076	0.072	0.117	0.081	0.075	0.072	0.050
<b>Drinks per meal - Actual</b>										
mean	0.661	0.555	0.482	0.488	0.512	0.613	0.705	0.641	0.657	0.658
std	0.097	0.070	0.091	0.105	0.170	0.121	0.127	0.131	0.152	0.105
<b>Labor hrs per meal - Actual</b>										
mean	0.127	0.127	0.133	0.125	0.176	0.130	0.112	0.108	0.118	0.103
std	0.015	0.030	0.021	0.019	0.021	0.035	0.016	0.012	0.016	0.017
<b>3 Month Profit Contribution</b>										
mean	\$24,497	\$37,471	\$44,696	\$58,956	-\$9,991	\$42,109	\$68,254	\$91,231	\$42,926	\$85,604
std	27773.693	42288.387	39365.482	43676.874	35841.667	41624.287	50791.308	70558.650	44213.138	39887.493

**b. Did the ten clusters differ significantly on one or more of the key performance dimensions?**

Yes, this can be seen in the table shown above.

**c. How much of the profit margin variance is explained by the clusters?**

VARIABLES	(1) Avg. meal profit— Actual	(2) Drinks per meal—Actual	(3) Labor hrs per meal—Actual	(4) Store Margin— Actual
Downtown Eat In Dining	0.0366 (0.0486)	0.149** (0.0737)	-0.0491*** -0.0121	<b>0.253***</b> <b>(0.076)</b>
Downtown Mixed Dining	0.0848* (0.0512)	0.043 (0.0777)	-0.0492*** -0.0127	<b>0.254***</b> <b>(0.0801)</b>
Drive Thru, Developing	-0.0108 (0.042)	-0.03 (0.0637)	-0.0424*** (0.0104)	<b>0.304***</b> <b>(0.0657)</b>
Drive Thru, Mature	0.00148 (0.0412)	-0.0233 (0.0625)	-0.0507*** (0.0102)	<b>0.341***</b> <b>(0.0644)</b>
Non-traditional	-0.0849* (0.0437)	0.101 (0.0662)	-0.0459*** (0.0109)	<b>0.279***</b> <b>(0.0682)</b>
Shopping Mall Eat In Dining	0.0745* (0.0409)	0.193*** (0.062)	-0.0637*** (0.0102)	<b>0.348***</b> <b>(0.0639)</b>

Shopping Mall Mixed Dining	0.055 (0.047)	0.129* (0.0712)	-0.0677*** (0.0117)	<b>0.375***</b> <b>(0.0734)</b>
Strip Mall Eat In Dining	0.0763* (0.0417)	0.145** (0.0633)	-0.0578*** (0.0104)	<b>0.296***</b> <b>(0.0652)</b>
Strip Mall Mixed Dining	0.0308 (0.0454)	0.145** (0.0688)	-0.0732*** (0.0113)	<b>0.393***</b> <b>(0.0709)</b>
Constant	4.193*** (0.0397)	0.512*** (0.0602)	0.176*** (0.00986)	<b>-0.153**</b> <b>(0.062)</b>
Observations	246	246	246	<b>246</b>
R-squared	0.282	0.375	0.255	<b>0.162</b>

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Drive Thru, New set as baseline.

The R<sup>2</sup> for the profit margin is only .16.

#### d. Interpretation of results

The clustering proposed by the consultant does not explain a high proportion of the variance, but it does explain a significant amount of variance, so it is better than having no clustering. They do provide a useful opportunity for benchmarking.

#### e. What other ways to do clustering? Overall assessment.

Other ways of doing clustering—add more predictors:

- Type of marketing campaign
- Type of customer
- Demographics

#### Question 5: Rank the locations

a. Rank the locations on % achievement of profit margin target

b. Rank the locations on total profit opportunity

These are too much data to be shown here, but students should realize that there are some dramatic differences in rankings. This can be illustrated in Question 6 below.

c. Correlation between total profit opportunity per meal and the performance metric the restaurant had been using: % achievement of profit margin target

This correlation is **-0.64**. Higher profit opportunities (money left on the table) leads to lower achievement of profit targets. This is intuitive.

**Question 6: Focus on five restaurants:**

	Location 006	Location 170	Location 235	Location 137	Location 153
<b>% Achievement of Store Margin Target</b>					
Value	63%	49.3%	41%	157%	156.2%
Ranking	169	186	197	17	20
Rating	Below Average	Poor	Poor	Excellent	Excellent
<b>Total \$ Opportunity</b>					
Value	\$1,033	\$11,300	\$7,328	\$1,361	\$13,515
Ranking	62	236	191	67	244
Rating	Good	Poor	Poor	Good	Poor
<b>Total Profit Opportunity per Meal</b>					
Value	\$0.038	\$0.437	\$0.284	\$0.020	\$0.293
Ranking	6	233	205	53	208
Rating	Good	Poor	Poor	Excellent	Poor

The information in the table shown above confirms that location 137 is a top performing restaurant, exceeding profitability targets with little missed profit opportunity either in total or per meal. Location 153 has met its profitability targets, but its opportunity figures are high. It is leaving a lot of money on the table. Based on this information, the manager of location 137 should be considered for promotion, but not the manager of location 153. **Students who miss the importance of the opportunity metrics have missed a key point in the case.**

While the managers of locations 006, 170, and 235 have claimed that the current evaluation system is unfair, the manager of location 006 may be justified in his claim. While this location fell short of its profitability target, the chart above demonstrates that this location is a high performer when evaluated based on profit opportunity both in total and per meal. Location 006 capitalized on its potential, leaving little profit opportunity unfulfilled relative to the other locations examined above.

## Question 7: Evaluation and decision recommendations

### a. Strengths and weaknesses

Strengths:

- Increased controllability both from more granular measures and comparisons of actuals with targets that take restaurant differences into consideration
- More strategic guidance

Weaknesses:

- More complex
- Managers are still subject to effects of some uncontrollables (e.g., prices)

### b. Recommendation

Many possibilities:

1. Old system vs. new proposed system
2. Some kind of hybrid

### c. Implementation process

Many possibilities, including:

- Set target at average. As poor restaurants improve, average will move up over time.
- Start with just the three metrics. Add clustering later?
- Start with just a few clustering categories at first.
- New restaurants can be handicapped until they ramp up.
- Roll it out over time.
- Offer a one-time bonus for successful implementation?
- Emphasize that the new system is good both for the managers and the company

### d. How to determine bonus payouts

- Use a 50/50 weight (old vs. new system) for two years to test the new system and help managers understand it?
- Base a portion of the bonus on corporate performance?
- Continue with no bonuses if targets are not met?

### e. How to communicate decision to restaurant managers (and in particular those of 006, 170, 235, 137, 153)

- The new system is not about answering complaints. There will always be complaints.
- Explain the issue of growth leveling off.
- Show the dramatic differences between the types of restaurants.





**University of Southern California**

**Marshall School of Business**

Leventhal School of Accounting

## **Arrow Motorcar Corporation**

### **Teaching Note**

#### ***Purpose of Case***

This case introduces students to the role of boards of directors and to the difficulties boards often face. The case asks students to think about what should be the composition of a board and what functions a board should perform. Specifically, it highlights the trade-off between the board of directors' expertise, commitment, independence, and access to information.

Students like this case because Arrow Motorcar is a small company that they can comprehend relatively quickly. They also find the case interesting because the product is exciting (exotic sports cars), and the company faced a crisis (a major conflict between the president and the board of directors).

#### ***Suggested Assignment Questions***

1. Why did Arrow Motorcar Corporation have a board of directors before it went public? How (if at all) do the legal and moral obligations of private-company directors differ from those of directors of publicly-held companies?
2. Evaluate the board composition and actions. All things considered, did the board act properly? Did the board members choose the optimal time to terminate Billy Ray Repko?
3. What should the board members do now (March 22, 2016)?
4. What could have prevented or minimized the problems that Arrow and its board faced?

#### ***Case Analysis and Discussion Questions***

1. *In general, what functions should a board of directors perform?*

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Arrow Motorcar Corporation case.*

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Students' answers should include the following:

- Help develop company objectives and strategy
- Approve the business plan and hold managers accountable for it (compensation, termination)
- Approve important management decisions (operating, financing)
- Add expertise and contacts to decision-making process
- Develop a management succession plan
- Get involved in director selection (hopefully reduce the CEO's involvement)
- Generally represent shareholders; make sure shareholders are properly informed

2. *Are the functions of Arrow's board unique?*

Up until 2010, Arrow Motorcar was a private company. Board responsibilities do not change depending on whether the company is private or public. What changes is who they have responsibility to—a private owner or the public. The ultimate goal, owner protection (and also responsibility to all stakeholders), is the same for all corporations.

3. *What caused the conflict between Arrow's board and its president/CEO?*

Two major problems precipitated the showdown. First, the board suspected strongly that the president/CEO (Billy Ray Repko) had diverted money from the company to himself. Second, they thought the business plan that Repko was showing potential investors was so optimistic that it was fraudulent. If the company takes money based on that plan, then the board is part of the fraud. The company was also not performing well; it was having trouble paying its bills. In this “zone of insolvency” the board has a primary responsibility to creditors.

4. *Evaluate the Composition of the Board*

Many students will have strong (mostly negative) opinions about the composition of the board. After they have spent a few minutes voicing their opinions, help them answer the question systematically by first determining the characteristics of a board member that make him/her effective. Students should come up with a list similar to the left column of Table 1. Students can then discuss the degree to which each of the board members possessed these characteristics.

**Table 1: Board Evaluation**

	<b>Repko</b>	<b>Standell</b>	<b>Rosenfeld</b>	<b>Jacobs</b>	<b>Zuraidi</b>
<b>Independence</b>	None	Little	Little	Little	High
<b>Access to information</b>	Excellent	Good	Poor	Poor	Poor
<b>Expertise</b>	Excellent?	Excellent	Good	???	Presumably good
<b>Time/commitment</b>	Excellent	Good	Good	Good	Excellent

The purpose of this exercise is to help students recognize the trade-offs between some director qualities, particularly independence, access to information, and expertise. Inside directors are

not independent, but they have complete access to the information necessary to make good decisions. Outside directors are much more independent and usually have more diverse expertise. Unfortunately, outside directors often do not have access to complete information or the time and commitment to analyze information. In this case, all the directors (except Repko) were outside directors, although Standell served as a consultant, so he had easy access to company data. However, Standell and Jacobs were long-term business associates of Repko, so they could not be considered independent even though they were outside directors.

Whether or not students think the composition of the board was appropriate is relatively unimportant. However, they should recognize that until Zuraidi was added to the board, it was composed entirely of long-time associates of Repko. Particularly when the company went public, it should have added someone who was totally independent of Repko.

Students should also note that as chairman of the board, Repko arguably had too much control. When the company went public, Repko owned 70% of the company, so he had significant control. (After the Malaysian investment, Repko owned 35%.) He called the shareholders meetings, and he decided who was on the board. Students should recognize that Repko was able to “give everybody enough information to support the conclusion he wants them to reach” because he controlled the agenda of the board meetings.

If students do not bring this issue up, ask them if they think it is appropriate for the CEO to also be the Chairman of the Board. Separation of the roles of the chairman and CEO have long been among the recommendations of board monitors like ISS. However, empirical evidence has never shown a statistically significant difference between companies with the roles separated vs. those with the roles combined. Leaving these two roles combined seems to work well in many situations. The key factor seems to be the style of the Chairman/CEO.

5. *Over and above composition, evaluate the board. Did they act appropriately?*

This “big” question can be posed directly to the students, or the question can be disaggregated as follows:

- a. Should the board have terminated Repko at the time of Jacob’s bidding (early 2015)? If so, what kept them from doing so? If not, how should they have dealt with the situation?

Most students’ initial reaction is that Repko should have been terminated at this point. However, their response is probably affected by hindsight bias—knowledge of what happened subsequently. The reasons Repko was not terminated at that time are given in the case (legal difficulties, no successor), as well as his long-time relationship with directors. The directors also felt Jacobs had not done his homework properly. He had gotten a few points wrong, and when Repko pointed those out at the board meeting, it destroyed Jacobs’ credibility.

(It is interesting to note that the external auditors thought this whole dispute was immaterial. They did not even look at the expense statements.)

The directors thought that when Repko did something illegal, that was totally different than just not making good management decisions. This makes an interesting discussion point. In a case like this, can poor performance be grounds for termination, or only dishonesty? Without the authority to terminate the CEO, the board has very little control. On the other hand, students should recognize the consequences of terminating a CEO too hastily. If directors terminate CEOs whenever they disagree with executive

decisions or during every period of poor performance, CEOs will become risk averse and extremely myopic. The problem is more difficult here because the CEO is also the company's founder and because start-up companies usually have cash flow struggles.

In Arrow's case, the board did attempt to control the CEO through alternative means (i.e., they set up a new system for charging personal expenses). Unfortunately, no one made sure that this system was implemented. The board could also have increased its control by asking for more information prior to board meetings. It could have made the CEO's raises/bonuses dependent on changes they wanted made (e.g., controlled spending, production objectives).

- b. When it finally acted, was the board correct in its decision to terminate Repko? Considering Repko's reaction, and the toll it would likely take on the company, was firing Repko really in the best interest of shareholders?

Students might note that at this point the board still did not have what it wanted—an Act II. Students will rightly argue that business will probably suffer since the CEO of the company is barricaded inside of the building and the directors are locked out. It should be fairly clear, however, that Repko is totally out of control and has become a major liability to Arrow. Obtaining financing is jeopardized because of Repko's reputation. Repko breached trust with Arrow's largest shareholder, and he has little regard for the law (evidenced by his desire to file a 10-K without full disclosure and by his use of a fraudulent business plan).

An interesting point is that the board did not take action until the company had hit rock bottom financially. What if company finances were in order? Should the board still have fired Repko for his spending, conversion of funds, and management style? Do you think they would have? The point students should take away from this discussion is that terminating a CEO is a severe remedy, and is not always a clear-cut decision. Directors don't want to be too hasty in terminating a CEO, and often wait until the CEO has already caused severe damages before doing so.

6. *What was the board's major failure?*

In retrospect, the board members concluded their major failure was their inability to get the right information. If they had had the right information, they would have acted on it. However, they also felt that to a large degree, boards have to assume they're getting the right information. If boards are not being given the right information, then they obviously do not have the right top management group in place.

How did Arrow's directors access information? It was fed to them during boardroom meetings by Billy Ray Repko. To some extent, they were limited by Arrow's small size (e.g., no internal audit staff). However, the directors also had access to information through less formal means. Standell consulted to Arrow, giving him an almost insider status. Jacobs became aware of problems through informal discussions with Bob Smith and other Arrow employees. Outside investors made West (Jacobs' replacement) aware of Repko's reckless management style. The communications that took place *outside* of the boardroom is what enabled directors to recognize and act on problems as quickly as they did.

In the opinion of Harry Standell, the crisis occurred because Repko felt the company owed him. He starved before the company went public, and he first felt, "The company owes me." Then he took on a movie star role. He stayed in the best hotels, and he believed he was

entitled to because, "I am the company." This evolved into a belief that "I owe me. There is nothing wrong with my taking money from the company." In Standell's opinion, "Repko was never able to separate himself from the company."

7. *Suggest improvements that would make the board more effective.*

Student's suggestions should include the following:

- Split the job of CEO and Chairman of the Board; combining the roles is not working in this case
- Add directors to the board who are independent (not CEO's friends or employees)
- Provide information to the directors prior to the board meetings
- Formally evaluate the CEO's performance on a regular basis
- Let directors or shareholders nominate new directors
- Select executives for succession to the position of CEO and monitor their progress
- Give directors broader authority to terminate the CEO; terminate if CEO is a serious detriment to shareholder value, even if his actions are not illegal

8. *What happened?*

It was not easy to get Repko out of the company building. The police would not act. They were not convinced Repko had committed a crime. They knew just that he was having a conflict with his board.

The board members sought a restraining order from a judge. This order would have forced the police to act. However, the judge assigned to the case said he did not know who was right. (The board has an absolute right to fire a CEO, but the judge did not understand this.)

The board members felt they had no choice but to fight on. If they quit, they would face potentially significant liability problems. They also thought that fighting was the morally correct thing to do.

It took the board six months to get the restraining order. Then the board retook control. They immediately shut the company down. They found that Repko had sold four cars in the interim and pocketed 70% of the money. He had opened two bank accounts without board authority. A lot of business records were missing.

Arrow was eventually bought by a big-name sports car company, which valued its technology.

Arrow's board sued to recover some of the damages. They collected only \$300,000 plus interest.

Repko sued the board for wrongful dismissal. He was awarded \$200,000.

## **Pedagogy**

Most students know little or nothing about boards and their functioning. The chapter reading provides a basic discussion, but instructors will probably have to either provide a supplemental lecture about the role and functioning of boards or be prepared for many questions from students. The outcome of this teaching note provides a rational way to walk through the issues in the case, and questions will naturally surface.

## Golden Parachutes?

### Teaching Note

#### *Purpose of Case*

This case illustrates the functioning of a compensation committee of a corporation's board of directors. The specific issue being discussed is the possible approval of a lucrative severance agreement for five members of top management. As with many such issues, the issue presented in the case does not have a clear answer. Judgment is required.

#### *Suggested Assignment Questions*

1. Is the proposed severance agreement in the best interest of:
  - a. The executives included in it?
  - b. DTI and its shareholders?
  - c. A company that is acquiring DTI?
2. Should the compensation committee approve the severance agreement as is? Should some of the elements of the agreement be modified? Or should DTI not have a severance agreement?
3. Suppose that you, as Dennis Feingold, object strongly to at least some of the elements of the severance agreement but that the other two members of the DTI compensation committee recommend adopting the agreement as it is written. Would it be worthwhile for you to voice your objections forcefully and, perhaps, to take the issue to the full board of directors? Or would you consider it adequate just to cast a negative vote when the issue comes up in the compensation committee?

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Golden Parachutes case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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## Case Analysis

Except when this case is used in classes comprised of board-savvy executives, it is likely that most students will have little or no familiarity with either compensation committees or severance agreements. The issues and terminology will be new to them. Thus, it is probably important to spend some class time understanding the basic issues in this case.

### The Compensation Committee

Database Technologies, Inc.'s (DTI's) compensation committee is a subcommittee of the company's board of directors. Compensation committees have fiduciary responsibilities for ensuring that the company's compensation programs are adequate, but not excessive, to attract, retain, and motivate good employees. This particular committee has three members, all of whom are outside (independent, non-management) directors.

### The Severance Agreement

In this case, which presents a disguised version of a real situation, the CEO asked the compensation committee to consider the adoption of a severance agreement for top executives. There was some short-term urgency because a larger company was considering acquiring DTI. The CEO was concerned that if DTI was taken over, or even if a takeover was thought to be a good possibility, some top executives might quickly leave the company at a time when their services were badly needed. Moreover, even if they stayed, they might be distracted because of worries about their futures.

It is true that top executives of the type proposed to be included in the severance agreement—the CEO, COO, CFO, CTO, and general counsel—typically lose their jobs soon after a takeover. The elimination of the compensation of these high-paid employees is a part of the “synergies” that firms count on when they acquire other firms.

These five executives benefit greatly from this severance agreement. (This is the answer to suggested assignment Question 1.a.) Under the terms of the proposed agreement, if these five executives were terminated within the first two years after the acquisition, or if their jobs were downgraded in any of the ways described in the case (e.g., reduction in status, reduction in pay, relocation), they would be paid essentially two-years' worth of compensation (salary, bonuses, and benefits), and all of their stock options would vest immediately. This agreement would provide the executives financial protection that would presumably free them from immediate concern about their personal futures so that they could concentrate on their jobs until such time the acquiring company no longer needed their services.

### Issues for Discussion

The case presents many issues for discussion, most of which are described in the case from the point of view of one of the compensation committee members.

1. *Benefit to the DTI shareholders* (suggested assignment Question 1.b.). As described above, there is a clear benefit to DTI's shareholders in having these executives focused on the best interests of DTI at the time of a takeover. However, see item #4 below.
2. *Benefit to the acquiring company* (suggested assignment Question 1.c.). The acquiring company might also benefit from having these executives around during a transition period.



3. *Conflict of interest.* It is interesting to note that the request for consideration of a severance agreement came from the CEO, who is one of five individuals included in the plan. Who should have raised the idea of a severance agreement? Should it be looked at extra hard because the idea came from the CEO? Yes. However, also note that the proposed plan was drawn up by DTI's *outside* counsel, not the inside general counsel.
4. *Cost.* The severance payments, if they were made, would total about \$12 million. This cost would be borne by DTI's shareholders because the acquirer would be aware of the need to make these payments and would presumably reduce the acquisition price.

The key cost schedule is shown as Exhibit 1 of the case. About 14% of the total cost is caused by the so-called "golden parachute tax." Some students will not understand how this tax works, so it is useful to spend some time walking through the details of this exhibit.

The term "golden parachute" has an intentionally pejorative connotation. Congress intended the law to suggest that when the golden parachute tax is triggered, the payments are excessive. However, in this case, the golden parachute tax is triggered because of what some people might consider a technicality, the immediate vesting of some options with a long vesting period.

5. *Fairness.*
  - a. The \$12 million would be paid to just five individuals, most of whom were already wealthy.
  - b. DTI had not performed very well in recent years. Why should these individuals be rewarded so handsomely when DTI's shareholders had not benefited much from their efforts?
  - c. Other employees' jobs were also at risk. Why were they then not specifically included in the severance agreement?
  - d. Many other corporations have implemented severance agreements like the one proposed in this case. Why shouldn't the DTI executives enjoy the same job security that their counterparts at other corporations have?

(Elements of Point no. 5 can be used to address suggested assignment Question 2.)

6. *Reflection on the effectiveness of DTI's board.* (This discussion is related to addressing suggested assignment Question 3.) It is important for students to understand the pressure board members face to "go along" with a majority (on the full board or on a committee). Dennis can raise his concerns at the committee conference call and, perhaps, a subsequent in-person meeting, but it is probable that the other two compensation committee members will be convinced by the simple argument that "other companies are doing this, so we should too." That logic provides legal protection if the decision to implement the severance agreement was later challenged in court. That is often the first question that board members ask—If taken to court, will we be found in violation of our fiduciary obligations of duty of care, duty of loyalty, duty of good faith, and duty not to "waste," as described in Chapter 13 of the book.

But should board members have a higher sense of responsibility? Is adoption of the severance agreement in its current form *the right thing to do*? Are the concerns here so significant that a board member should press the argument forcefully in the committee meeting and, potentially, in a full board meeting? Doing so will probably create some hard

feelings because the timing of board and committee meeting agendas is typically tight. Dennis could get the reputation of being someone who is difficult to get along with. Moreover, many board votes are unanimous.

Dennis could cast a probably minority vote against adoption of the severance agreement. If the board was later found guilty of violating its fiduciary responsibilities, this vote might provide him with a small amount of some legal protection personally. It might also clear his conscience.

Many people, such as those at The Corporate Library, an oft-quoted corporate watchdog organization, consider compensation committee decisions a good window into the functioning of the entire board. If the compensation committee is willing to stand up against the CEO with regards to compensation issues, then it is likely that the company's board will be willing to take strong stands on other issues. While the DTI board would cease to exist after an acquisition, the stance of the DTI board and its committees, while it existed, could have a significant lasting effect on the personal reputations of the DTI board members.

### ***Pedagogy***

With an experienced audience, such as a group of board members, this case can be taught as a "vignette." If issues like board roles and the functioning of the golden parachutes tax do not have to be clarified, the specific severance agreement issue can be discussed adequately in perhaps 30 minutes, or less. However, with an inexperienced audience, this case can easily consume a full 75-minute class period.

The organization of this teaching note is intended to suggest one useful way to structure a discussion of this case. No neat summary of the "right" answer is possible. Board members must make a number of difficult judgments. This case describes just one illustrative example.

## Pacific Sunwear of California, Inc.

### Teaching Note

#### *Purpose of Case*

This case illustrates one company's efforts to comply with the Sarbanes-Oxley Act of 2002 (SOX) and, in particular, Section 404 of the Act requiring elaborate tests and certifications of the effectiveness of the company's internal control system. In this case, the company's executives have concluded that the costs of this effort greatly exceeded the benefits to the company. They are endeavoring to cut their compliance costs and to redeploy their control and internal audit resources to other, more important tasks, such as enterprise risk management.

However, instructors can present the other side of the argument to students. They can raise the question as to whether these executives' judgments are correct. If they are, is there something about the way in which this company went about the compliance effort or something about the industry setting that makes SOX compliance particularly burdensome or particularly unbeneficial.

#### *Suggested Assignment Questions*

As mentioned above, Pacific Sunwear of California, Inc.'s (PacSun) executives are negative about most of the SOX 404 compliance experience. Instructors who want to present students with an opposing view can find any of a number of materials to assign. One such article is:

S. Wagner and L. Dittmar, "The Unexpected Benefits of Sarbanes-Oxley," *Harvard Business Review*, April 2006.

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of the Pacific Sunwear of California, Inc. case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion.*

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Suggested questions:

1. Evaluate the process that PacSun went through to comply with SOX, and particularly Section 404. Was that process as effective and efficient as it could have been?
2. Are the “significant deficiencies” that were identified in each of the two years of the audit evidence of control system flaws or largely irrelevant technical violations? In other words, should disclosure of these deficiencies have had a negative effect on PacSun’s stock price?
3. PacSun executives seem convinced that the costs of complying with SOX were greater than the benefits to the company. Why did PacSun not benefit from the compliance process to the same extent as some other companies? Or were their compliance costs too high?

## **Case Analysis**

### **SOX**

SOX is an important backdrop to this case. Before discussing the case, instructors need to ensure that students are at least aware of the basic requirements imposed by this legislation. Textbook Chapter 13 provides a summary of the SOX provisions, as does the case. It is particularly important for students to understand the meaning of the terms *deficiency*, *significant deficiency*, *material weakness*, and *404 opinion*. Students should also understand the nature of the required certifications and the bases for them. Instructors can review these provisions or go into greater detail in certain areas as they deem appropriate for their audience.

### **The Year One 404 Process**

The first year for SOX compliance was uncomfortable for all companies and all auditors. The law had been passed over a year earlier, but the understanding of the implications of the law was unfolding throughout the first year in which the companies had to comply with it. Note that at PacSun, the compliance process for the first year (ending January 2004) did not begin until mid-year 2003. Ideally, the planning process would be complete early in the year, documentation would start early, and the testing of the controls would take place over the entire year. However, in the first year, nobody was quite sure about what was required. Because PacSun and its 404 compliance consultant, which was a consulting arm of a Big-4 auditing firm, got a late start, and the process was rushed. In almost all companies, people were working long hours, frustration levels were high, and sometimes tempers were short.

The actual process used is a logical one. It compares favorably to the “best practices” described in a recently published FEI monograph.<sup>1</sup> (This is the suggested answer to Question 1 in the assignment.) SOX requires documentation of all significant controls. It should be noted, though, that significance is determined by the possible effects on the company’s financial statements, not the company’s success or failure or risks. The PacSun consultants took a process approach to the project, as is typical. They identified 21 major processes, which encompassed a total of 238 key controls. As compared to the number of key controls identified by other companies, 238 is quite a modest number. This suggests that the consultant did a good job in identifying the *key* controls, rather than documenting every control they could find. However, as

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<sup>1</sup> See R. A. Howell, C. M. de Graziano, and W. M. Sinnett, *Sarbanes-Oxley Section 404 Implementation: Practices of Leading Companies* (Florham Park, NJ: Financial Executives Research Foundation, 2005).

is pointed out in the case, PacSun had some advantages in that they have a single, simple business model, and all of their major operations are in one location.

Each of the processes and controls had to be documented. The documentation part of the compliance process created a lot of work. Examples are shown in case Exhibits 3 and 4. Particularly burdensome for many companies was the documentation of old (“legacy”) systems that had been used for years but never documented. Many companies did their own documentation, but PacSun hired the consulting firm to do most of this work.

Then each of the controls had to be tested. These tests were jointly conducted by the consultants and PacSun personnel, including both the process “owners” and the PacSun internal audit staff. If deficiencies were found, corrections had to be designed and implemented, and the controls had to be tested again. At the end of the year, the CFO had to certify the effectiveness of the company’s internal controls, or to disclose the material weaknesses discovered. The PacSun CFO’s certification is shown in case Exhibit 5. Although it is not legally required, PacSun passed this certification responsibility down through the organization, to all officers (see case Exhibit 6) and process owners (case Exhibit 7). This sharing of responsibility helped underline the importance of the 404 compliance process and helped to strengthen the company’s control environment.

The case describes the details of the one *significant deficiency* that was identified in year one. Financial statement restatements always are cause for the identification of a significant deficiency, or worse, a *material weakness*. Note that the CFO downplayed the significance of the significant deficiency found, as did PacSun’s auditor, Deloitte. (This is their answer to Question 2 in the assignment, and they are probably right.) Deloitte gave PacSun a “clean” 404 opinion, as is shown in case Exhibit 8. However, there is disagreement as to whether this deficiency should actually be called a material weakness. Two of the Big-4 auditing firms concluded that it should. The stakes are large, as the existence of even a single material weakness is grounds for a qualified 404 opinion. This labeling inconsistency, even among the largest audit firms, provides strong evidence of the considerable subjectivity involved in these judgments and the need for better guidance from the regulators, in this case the PCAOB.

### **The Year Two 404 Process**

Like most companies, PacSun found SOX 404 compliance much easier in year two. Both company and audit personnel understood the legal requirements better, The SEC and PCAOB had issued numerous clarifications, and everybody had a year’s experience with the requirements. In addition, most of the documentation had already been completed. The fact that PacSun’s number of key controls was reduced only 7%, from 238 to 222, is further evidence that its process was well designed from the start. In year two at PacSun, again only one significant deficiency was found, and again this deficiency does not look very significant.

### **Costs vs. Benefits**

PacSun’s costs of complying with SOX Section 404 are shown in case Exhibit 9. The costs were about 2.5% of net income in FY 2004. This dropped to a little over 1% in FY 2005.

Were the benefits to the company greater than the costs? PacSun’s CFO admits that the documentation and testing processes provided some benefits in helping the company identify and fix some control weaknesses. However, he argues that the benefits to the company were much smaller than the costs of complying.

Some articles, such as that mentioned in the suggested assignment, claim that other companies have benefited more from their SOX 404-related efforts, which have been particularly valuable in providing an understanding of, for example:

- Incomplete integration of systems stemming from mergers and reorganizations;
- Inadequate documentation;
- Redundant systems;
- Excessive reliance on manual controls in critical areas;
- Which controls matter, and which don't.

Beyond the 404 requirement, SOX also provided benefits to many companies in changing the control environment, such as by passing the responsibility for maintaining effective internal controls throughout the organization and by strengthening the role of the audit committee of the board of directors.

Why did PacSun apparently not enjoy these benefits to the same extent as some other companies? The answer seems to be that the company's control system was in reasonable shape before the SOX requirements were imposed on the company. Therefore, there was little to be gained. (This is the answer to Question 3 in the assignment.)

The primary purpose of SOX was not to benefit individual companies, however; it was to provide better financial statements and better protection for investors. This same cost-benefit question is also being debated at the societal level of analysis. Many SOX critics argue that the costs are far greater than the benefits. SOX clearly raised the costs of being a public company in the United States, and some of the effects of these costs are becoming apparent. For example, some companies are going private, and others are choosing to list their securities in non-U.S. markets. Clearly SOX will not prevent all corporate fraud and accounting gameplaying, as PacSun's CFO points out in the case. However, SOX also has its defenders. The debate rages on.

## Research Findings

Time allowing, it is useful for instructors to bring some of the SOX-related academic research findings into the classroom. At the time of the writing of this teaching note, academic tests of the market reactions to SOX-related disclosures were just beginning to appear. This teaching note is not the proper forum for a thorough review of this literature, but a few suggestive findings will be mentioned.<sup>2</sup>

One interesting statistic is regarding the percentage of firms that received an adverse 404 opinion. The consulting firm Audit Analytics ([www.auditanalytics.com](http://www.auditanalytics.com)) reported that in the first full year, 15.9% of firms received an adverse opinion indicating at least one material weakness.

But does it matter if a company gets a clean or adverse 404 opinion? The early evidence suggests that it does. On average, firms with adverse opinions had negative abnormal returns in

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<sup>2</sup> A useful overview paper is by I. X. Zhang, "Economic Consequences of Sarbanes-Oxley Act of 2002," *Unpublished Working Paper*, University of Rochester, February 2005.

the forthcoming period. However, not all did, which suggests that investors look at the reasons for the adverse opinions. Some material weaknesses are apparently interpreted as technicalities, while others are deemed to be significant. Moreover, interestingly, on average, firms that got clean 404 opinions had positive abnormal returns. Those positive returns were highest for firms that had been known to managing earnings significantly, suggesting that investors were anticipating that SOX would constrain earnings management activities.<sup>3</sup>

SOX apparently also had other effects, some positive and some negative. One is a tendency for some firms to go private to avoid the additional SOX compliance costs that must be borne by publicly-traded firms.<sup>4</sup> This is evidence that some firms, like PacSun, think that the costs of complying with SOX are greater than the benefits. Another is a related set of effects on the functioning of boards, including increased difficulty for firms to recruit board members, longer board and audit committee meetings, and higher D&O insurance premiums.<sup>5</sup>

## **Pedagogy**

This case is intended to give students a feel for what companies went through in complying with SOX, and particularly Section 404 of the Act. It also motivates a discussion of whether SOX merely imposed compliance costs on firms, for the purpose of improving financial reporting, or whether firms' control systems were improved because of the additional requirements. The answer is both but, of course, some companies benefited more than others.

Instructors can deliver these messages by lecturing. However, letting students get involved in a discussion of this case will deliver a more powerful message by letting students discover it for themselves. Therefore, we recommend that instructors try to teach this case in a nondirective manner, intervening only to keep the discussion going and, if desired toward the end of the class, to interject some relevant research findings.

The ordering presented in this teaching note is a logical way to organize a class. Here is a reasonable time budget:

Clarification of SOX requirements	20 minutes
Evaluation of the year 1 process	30
Evaluation of the year 2 process	5
Costs vs. benefits	10
Research findings/conclusions	<u>10</u>
Total	75 minutes

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<sup>3</sup> See H. Li, Morton P. K. Pincus, and S. O. Rego, "Market Reaction to Events Surrounding the Sarbanes-Oxley Act of 2002 and Earnings Management," *Unpublished Working Paper*, University of Iowa, September 2006.

<sup>4</sup> See E. Engel, R. M. Hayes, and X. Wang, "The Sarbanes-Oxley Act and Firms' Going-Private Decisions," *Unpublished Working Paper*, University of Chicago, May 2004.

<sup>5</sup> J. S. Linck, J. M. Netter, and T. Yang, "Effects and Unintended Consequences of the Sarbanes-Oxley Act on Corporate Boards," *Unpublished Working Paper*, University of Georgia, May 2006.

## Entropic Communications, Inc.

### Teaching Note

#### *Purpose of Case*

The Entropic Communications case was written to illustrate the process of implementing a formal enterprise risk management (ERM) process. ERM is a developing management practice. Perhaps no company can be said to have developed an ERM process that cannot be improved. Entropic's ERM stage of development is early. The case provides students with an understanding of the steps needed and the challenges faced in implementing such a process. The case also motivates a discussion as to whether the benefits of an ERM process are worth the costs.

#### *Suggested Assignment Questions*

1. Why did Entropic implement a formal enterprise risk management (ERM) process?
2. Do you think the company realized the benefits of ERM as envisioned by COSO? Why or why not?
3. What changes would you suggest for making the ERM process at Entropic more effective?
4. ERM is currently one of the hottest topics being written about in management, accounting, and corporate governance practitioner journals. Virtually every company is looking at the technique and deciding whether and how to use it. Do you think the ERM technique is a fad that will soon disappear or an improvement that will provide enduring benefits to a broad range of companies?

Depending on the students' backgrounds, it can be useful to assign a background reading on ERM, such as the COSO *ERM Risk Management—Integrated Framework*, Executive Summary (September 2004). This document is available on the COSO website ([www.coso.org](http://www.coso.org)). Alternatively, many articles have been published on ERM in recent years.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Entropic Communications, Inc. case.*

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I also find it useful to provide a brief introductory lecture to get my students into the topic. My lecture discusses the concept of risk, the importance of managing risk, types of risks, the fact that not all risks are equally important, the invention and evolution of ERM, the advantages of a formal risk assessment, levels of ERM sophistication, and the current state-of-the-art. How much of this is necessary depends on the students' knowledge levels prior to discussing the case.

### Questions for discussion

1. What is the financial reporting approach to risk?

I like to start class by discussing the financial reporting approach to risk. I do this by directing students' attention to Exhibit 5 in the case, which is taken from Entropic's 10-K report. I read some examples to the students, such as "Fluctuations in the mix of products we sell may adversely affect our financial results." I want the students to see that this list is basically a laundry list of things that can go wrong. It is ultraconservative and unprioritized. Whether or not this list is useful for readers of financial statements, it is not useful for managing risk, with the possible exception that creating the list might raise awareness to certain kinds of risks.

2. Why was Entropic moving toward implementation of an ERM process?

The primary motivation at Entropic was a desire to help the board of directors fulfill its fiduciary obligation to monitor the company's risk management practices. The company must have a framework that defines its goals, roles, activities, and desired results. How does a board document that it has done its job? Lance Bridges believed that having a formal ERM process and documents (e.g., heat map) would be useful.

3. Why was the general counsel driving this effort? Is he the right person?

Lance began this effort because he was the corporate secretary and had frequent contact with the company's board of directors. He also had experience in dealing with legal risks. He thought that using the frameworks and tools that he used in the legal risk area would be useful in other parts of the company.

Some students will argue that the ERM effort should be driven by the CEO or CFO. Certainly the CEO must agree that the ERM effort is worthwhile or it will not go far. However, most CEOs are quite busy and are not interested in leading an ERM effort unless their style is very process oriented. Some ERM efforts are driven by the CFO. However, Entropic's CFO was not particularly interested. Lance had the interest in and enthusiasm for ERM, and in the end that is one of the most important qualities that an ERM champion must have.

4. What was the implementation process?

- a. Sort the risk areas listed in the 10-K by department.
- b. Ask the department heads to augment the list.
- c. Ask the department heads to rate each risk on two dimensions: likelihood and severity. From this the Risk Management Matrix (aka "heat map") is created.
- d. Ask the department heads to formulate risk response/mitigation plans.
- e. Communicate the Matrix to the management team and board of directors.
- f. Monitor the risk areas and risk responses semi-annually.

## 5. Issues

This case raises quite a large number of issues. Here are some of the most prominent:

### a. Enthusiasm

Not all of the department managers are enthused about the new ERM process. The HR and marketing managers got into the process more than the finance and engineering managers. Is this a natural breakdown? Are finance and engineering managers inherently less interested in ERM. No, manager interest by function varies widely across organizations. At Entropic, the finance and engineering managers thought that ERM was redundant with the processes they were already using. In other companies, those managers might find ERM useful.

### b. Silos

One of the primary purposes of ERM is to break down departmental silos, to get managers to consider risk interdependencies that occur between and among departments. That did not happen at Entropic. There were no cross-department meetings. No risk committee was formed. Communications were basically exclusively between Lance and the department heads.

Is this a problem? Yes, it is reflective of an early, immature process. Clearly not all of the risks at Entropic are wholly contained within individual departments.

### c. Links with resource allocation processes.

There are no formal links between the Entropic's ERM and its resource allocation process. Again, this is reflective of the early stage of the development of the ERM process.

### d. No summary measure.

Developing the Risk Management Matrix requires managers to develop risk scores in each of the identified risk areas. Interestingly, however, the scores are not added up and the managers do not track risk score trends over time.

The reason for this is that the scores are not reliable. They are totally subjective. They will vary over time with the mindset of the rater. They will vary if a different person does a subsequent scoring. They will increase over time as new areas of risk are identified and added to the list.

As the ERM field matures, it is likely that firms will attempt to develop more reliable measures of risk. They will incorporate at least some objective risk indicators (e.g., number of safety violations). They might eventually try to develop "Risk Management Scorecards." However, some experts are not concerned that the risk scores cannot be trusted. They believe that the value is in the process, not the scores.

### e. Performance reviews.

The risk scores, and even enthusiasm for the ERM process, are not formally linked to performance reviews. Will managers take the process seriously without that link?

f. Focus only on known risks.

The Entropic process started with the list of known risks, as published in the 10-K. Is there a danger that the managers will focus on the known risks and fail to even think about other things that might happen? Yes, this is a potentially serious problem. Companies should try to force managers to think about other things that might happen (aka “unknown unknowns”), perhaps using brainstorming and scenario analysis techniques. That said, humans are believed to be weak at imagining a world they have never seen.

g. Focus only on downside risks.

ERM processes are reasonably effective at identifying and prioritizing the “bad” or “downside” risks and at organizing the steps needed to prevent the bad things from occurring. The ERM techniques grew out of the COSO internal control processes. Companies have a long history of using checklists to identify bad risks and areas where controls might be missing or deficient, where there is, for example, risk of fraud, loss of inventory, or computer shutdown.

The ERM processes and heat map outputs as we know them are much less effective for managing the “good risks”. They do not provide much help in identifying when taking risks is “prudent.” Some risks showing up as “red hot” on the risk matrix are exactly what the organization should want because the risk is well worth taking. If that risk area is within the organization’s core capabilities, then that is probably where the organization is earning its highest returns.

The COSO writings talk about managing risks to be within a company’s “risk appetite.” Presumably, there should be little or no appetite for bearing bad risks that can be avoided or mitigated at minimal cost. The risk appetite concept was designed to enable better management of the good risks. The concept can be applied fairly easily in some areas, such as in considering whether to hedge foreign exchange risk or in distinguishing financial institutions that would prefer to invest in subprime mortgages rather than high quality corporate debt. But can you tell what Entropic’s appetite for risk is? Can Entropic’s management explain their risk appetite? The answer is no. Most companies cannot define, much less quantify, their overall risk appetite. Other than possibly placing some boundaries on what risks should be taken, it will not help managers analyze what good risks should be taken. Improved management of the good risks will have to await further developments.

h. COSO framework

Entropic did not make any use of the COSO framework. For example, the managers just sorted risks by department, not by COSO objectives: strategic, operational, reporting, compliance. Is that a problem? Again, this probably reflects the immature state of the Entropic process.

i. Discharge of board responsibilities.

Did the ERM process help the board discharge its fiduciary responsibilities in this area? Clearly the answer to this question is yes.

However, I ask the students to take a guess as to how much time the board members spent reviewing the ERM process and the Risk Management Matrix in a given year. The choices I give them are:

< 1 hour

1–10 hours

> 10 hours

Most students choose either the second or third alternative. The answer is the first. The board members have an oversight role. They are happy that management has a process to monitor and manage risk, but they do not get into the details of the risk items and scores. Interestingly, though, virtually all of the time that board members spend in their meetings are focused on risk, particularly strategic risk.

j. Fit with industry

Does ERM fit a company like Entropic, a small high tech company in a fast moving industry? The answer to this question is probably yes. The risks are significant, and they must be identified and managed. However, because the company is small, it does perhaps not have all the specialized staff support, such as internal audit, that could be very useful in developing and managing an ERM process.

6. Critique

Toward the end of class, I ask the students to step back and consider whether the implementation of this ERM process was worth the effort. I capture their ideas on the front board.

However, then I ask them to do their evaluation in light of the ERM capabilities claimed by COSO, which were:

1. Align risk appetite and strategy
2. Enhance risk response
3. Reduce operational surprises
4. Identify and manage multiple and cross-enterprise risks
5. Seize opportunities
6. Improve deployment of capital

I ask them to rate Entropic's success in each area using the following scale:

- A. Realized some benefit
- B. Would realize some benefit if they improved the process
- C. Never going to happen

This approach usually produces some good thinking and understanding.

7. What should Lance do now?

More than a year has passed since the writing of the case, and indeed the ERM process at Entropic has continued to evolve.

- a. Department manager buy-in was much improved the second year, perhaps mostly because new managers were hired in the engineering and sales area. They were more interested in using the ERM processes for their own purposes than were their predecessors.
- b. A third dimension was added to the Risk Management Matrix. It was titled "Velocity," and defined as "a measure of how quickly the risk event will crescendo to its maximum damage, measured by loss of reputation, drop in stock prices or dollar cost to fix." The scale was (assuming nothing was done to correct or mitigate the risk):

1 = greater than one year

2 = more than 30 days but less than one year

3 = Less than 30 days

The total Velocity-adjusted score was defined as likelihood  $\times$  severity + velocity.

- c. Each risk type was classified using the COSO framework (strategic, operational, financial, compliance or legal)

I have brought ERM consultants into class to provide their reactions to the Entropic case. Among other things, they suggest that:

- Entropic should focus on a much shorter list of risks, only the "really top" ones.
- The departmental silos must be broken down to take a holistic view of each area of risk.
- Managers should be rated based on "how knowledgeable" they are about risk.
- Every function should be forced to participate effectively in the process. Only then would the company have an assessment of overall (enterprise) risk. It should not be seen as bureaucracy, but just part of what each manager does.

8. Is ERM a significant management advance or a fad that will fade away (the fourth assignment question)?

I don't know the answer to this question. Time will tell. Probably some of the approaches will live on, but maybe not all of the labels will. Formal risk management processes in the future will probably be somewhat different from what we see today. In particular, there probably will be more focus on how to manage the "good risks" and a better understanding of how to quantify and price risk.

## **Pedagogy**

My goal in teaching this case is to be as unstructured as possible while still ensuring that all the important issues are discussed. I tend to be fairly structured in guiding students through the first four discussion questions. However, then I will let the issues come up when students mention them, and I am not concerned about what order they appear in.



**University of Southern California**

**Marshall School of Business**

Leventhal School of Accounting

## **Bio/Precise Medical Devices, Inc.**

### **Teaching Note**

#### ***Purpose of Case***

The Bio/Precise Medical Devices (BPMD) case was written to illustrate the functioning of a board of directors *inside the boardroom*. The board of BPMD has to make a decision regarding self-disclosure of an apparent violation of the U.S. Foreign Corrupt Practices Act (FCPA). In considering this choice, students have to think about a variety of costs and risks. Or is this an ethics case: Should the board just do the “right thing” and have the company turn itself in to the U.S. Securities and Exchange Commission (SEC) and Department of Justice (DoJ)?

The case is also useful for introducing students to the FCPA. Similar legislation has been passed in many countries (e.g., the U.K. Bribery Act). These are important laws with severe consequences if companies fail to comply with their provisions. Organizational control systems have to ensure that employees follow laws such as this.

This is a real case. Only names and a few identifying facts have been disguised.

#### ***Suggested Assignment Questions***

1. Should the BPMD board recommend that the company self-report the FCPA violation?
2. Who should do what to ensure that company personnel never engaged in the illegal kickback practices again?

#### ***Case Analysis***

A. The FCPA

I spend most of the time in this class making sure that students understand the FCPA, the reasons why it was passed, and the implications for management. The case describes the

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basic provisions of the law, which prohibits facilitating payments to government officials. Instructors can present examples to make the law more tangible. For example:

1. Can a U.S. company employee take a government-company buyer to lunch? **No.**
2. Can a U.S. company employee give tickets to a sporting event to a commercial customer? **Yes.**

The law also contains some accounting provisions that require corporations to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls.

The purpose of the law was to have a positive impact on the prevention of corruption. Corruption occurs where an individual abuses a position of power for private gain. A common form of corruption in many countries occurs when a government or ministry official demands some form of payment as a precondition to awarding a contract or granting a service. Companies are willing to pay these payments to gain an improper business advantage. The payment can be in the form of cash, but it can also involve any of many forms of gifts, entertainment, or personal favors.

The penalties for violations of the FCPA are severe. They include both civil and criminal penalties and expensive remedies forced on the companies found guilty. What scares business people the most? Clearly the potential for jail time.

B. This specific example

How did this specific instance of a FCPA violation get discovered? It was by accident. The CFO was reviewing an operating report that made a vague reference to consulting payments, and the CFO knew that no consulting engagements had been approved. If the manager of the Chinese subsidiary had not used the “consulting” term, this violation probably would not have been discovered. And indeed, these illegal payments had been going on for at least 12 years.

Why did the auditors not discover this illegality? Looking for such violations was not part of their audit scope. Should it have been? The size of the payments was not material to the financial statements taken as a whole. In this case, the auditors did not feel any sense of responsibility. However, it should be noted, the potential penalties for an FCPA violation might well have been material. The company’s internal auditors did not discover this problem because they had never been assigned the task of looking for these types of violations.

How can companies prevent these violations from happening, or at least detect them promptly when they do happen? The list of potential controls is typical, including:

- Policies
- Training
- Hiring
- Internal controls
- Audits, both internal and external

C. The board decision

The BPMD board deliberated long and hard on this decision as to whether they could *self-report* the FCPA violation to the U.S. government regulators. They listened to advice from outside legal experts who specialized in FCPA issues. The lawyers could not tell the board what to do, but they could help the board members understand the costs and risks. There were arguments both for and against self-reporting:

Arguments in favor of self-reporting	Arguments against
<ul style="list-style-type: none"> <li>• It would end worry about getting caught.</li> <li>• It would end a cloud hanging over the company, which could be very important if the company were to put itself up for sale. At the due diligence stage of an acquisition, the company would have to disclose the violation.</li> <li>• It is the “right” thing to do.</li> </ul>	<ul style="list-style-type: none"> <li>• Probably nobody would ever discover the violation. The primary danger of discovery seemed to be from potential whistle-blowing.</li> <li>• The company would not have to plead guilty to a felony.</li> <li>• The company would not get fined.</li> <li>• It would be better and less expensive if the company was able to control its own response to the problem.</li> </ul>

In the end, the board members voted unanimously to self-report the violation. The most important factor seemed to be the second bullet point on the arguments-in-favor list. The company had begun discussions about putting itself up for sale. Having this hidden problem would greatly complicate that sales process, which did indeed happen two years later.

The remediation process provided to be long and costly:

- The Chinese subsidiary had to plead guilty to a felony and pay disgorgement of all the profits earned over the 12-year period plus additional interest of nearly \$1 million.
- The civil penalties and interest totaled several million dollars.
- BPMD had to hire a monitor, a forensic accounting firm, that did a thorough investigation of the violation, proposed a set of controls that had to be followed, and then conducted follow-up audits over the following 18 months. The out-of-pocket cost of hiring the monitor was several millions of dollars, and the cost of implementing the FCPA compliance program was also high.
- The manager of the Chinese subsidiary was fired. A new manager was hired and given extensive training about the provisions of the FCPA and its importance and strong instructions not to allow another violation to happen. Unfortunately, however, the monitor discovered another violation three months later, with the tacit involvement of the Chinese manager, so the new manager, too, was fired.



## Don Russell (A): The Outcome

On February 12, 1991, Don Russell, CFO of ETI sat at home contemplating the decision he had to make. As he looked at his six children playing in the backyard, he thought to himself, “You are going to end up in jail. This is stupid.” He felt he was in quicksand and just needed to get out. So the next day, Don told Joe Blevins, ETI’s president, “You are going to report this profit number”—a \$1 million loss for the second quarter of FY 1991 (ended December 31). Joe said, No! You can’t do this.” But Don insisted, “You are going to report this number because I won’t go to jail.”

Don actually felt that the reported profit should have been a loss of \$2 million, or more, because a lot of engineering and interest costs were still capitalized. But, he said,

I did not want to be brutal. I wanted a number that might allow Joe to conclude that I was stretching as much as I could in his direction. But if we showed a \$1 million loss, the trend would right.

Joe immediately called ETI’s chairman, who was in San Francisco on a business trip, and the chairman quickly called Don. He was furious. He asked, “What’s changed since last week? You’ve just got cold feet. We’ve got a plan to cut expenses and shore up our financing. Let’s just work the plan.” But Don had heard those promises before, and he did not change his mind. And he knew the company had no choice but to make the changes he wanted:

The quarterly report had to be delivered to the SEC on the 15th. They had no time to react, and I knew that was in my favor. If they had time, they would fire me and then report the numbers any way they wanted to.

Don’s demand forced Joe to call the bankers, analysts, and auditors immediately, and ETI reported the \$1 million loss for the second quarter of FY 1991.

At 8 p.m. that evening, Don went into Joe’s office and said, “I know you’re angry, but I know we’ve done the right thing.” Joe replied, “I hired you to make a difference. It wasn’t the difference I wanted, but you have made a difference.”

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*Professor Kenneth A. Merchant wrote this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. The case describes a real situation, but the facts have been disguised, and any resemblance to actual people or events is unintentional.*

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Two days later, after the chairman had returned from his trip, Joe called Don into his office. About this meeting, Don reported:

He literally went berserk. He called me every name in the book. He said I'd cost him his net worth of \$1 million and cost the chairman \$6 million. He said I had no right to have this much power and that I was not a team player. He was screaming at me. I think they suddenly realized that they couldn't explain any of this to the company's constituencies.

A few hours later, Joe told Don that he was fired, on the order of the chairman. Don's reply was, "It's probably going to take me a year to find another job. If you don't write me a check for a year's salary, I'll go right to the SEC, and that will cause you major problems." After a short pause to consider the offer, Joe wrote the check, and Don left.

About his ETI experience Don noted:

So now I'm out of a job. But I know that what I did was right. By allowing ETI management to manipulate the numbers, I was allowing the same thing that happened at C&S. People weren't focusing on doing the things that needed to be done. They were avoiding the hard decisions. If you're reporting profits, you can't go to your employees and say, "We're cutting 30% of you." And how do you tell Wall Street that "We've actually been lying to you about our profits?"

## Don Russell: Experiences of a Controller/CFO

### Teaching Note

#### ***Purpose of Case***

The Don Russell case was written to motivate a discussion of the economics and ethics of “managing” earnings and the roles of finance professionals (and general managers and auditors) in the financial reporting process. The case is compelling because Don Russell, a chief financial officer, has to make a decision that has significant company and personal consequences.

After they have discussed the case, the instructor can use a follow-up case, Don Russell (A): The Outcome (attached to this teaching note), which is designed for use as an in-class handout. The (A) case describes the decision Don made and motivates a follow-up discussion as to whether his decision was reasonable. (Some students will conclude that while Don appears to have acted ethically, according to his conscience, what he did could be interpreted as extortion of money from the company when he left.)

The case raises some complex accounting, organizational, and ethical issues. It has shown to work well with advanced masters-level and executive students. It could probably also be used with senior-level undergraduates to give them a “taste” of the real world.

#### ***Suggested Assignment Questions***

Assignment questions are not included in the case to allow instructors to tailor the assignment to fit their focus, but the following questions have been used successfully to motivate a class discussion on the major case issues:

1. Was Don Russell a good controller for Cook and Spector, Inc.? Why or why not?

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Don Russell: Experiences of a Controller/CFO case.*

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2. Does Don have the power to force ETI top management to make a correcting accounting entry? If not, what should he do? If so, should he force the entry to be made, and how large should it be?
3. Are earnings management practices such as those that took place at C&S and ETI smart? Are they ethical?

### **Summary of Case**

The case relates a true story (only the names and some figures have been disguised) about one chief financial officer's (Don Russell's) agonizing decision about whether to allow substantial earnings management to persist at his company, a small satellite broadcasting company. In making his decision, he had to consider the consequences to his company, users of his company's financial statements, and his career and personal finances.

The case starts by describing Don's educational and CPA-firm experiences: He did well at the CPA firm and completed an evening MBA. It then goes into considerable detail in describing Don's controllership experiences at a large consumer products company, Cook & Spector. He had many successes in modernizing C&S's accounting information systems, cutting costs in the controllership department, and helping the company achieve its earnings targets, and he was amply rewarded with both money and recognition for his efforts. During this four-year period, however, he engaged in many earnings management practices which he came to believe were actually harmful to the company. Finally, the case describes Don's experiences at Eastern Technologies, Inc. (ETI), a small satellite broadcasting company whose managers were using "extremely aggressive" financial reporting. Don is faced with a decision as to whether he should correct the financial reporting "problem." He knew that the company and his career might suffer significantly if he did so.

### **Analysis of Question 1**

The question as to whether Don was a good controller at C&S can be addressed either by comparing Don's activities against a set of criteria that define controllership effectiveness or by letting the class infer the meaning of effective controllership by analyzing the case descriptions of Don's activities ("letting the case method work"). In either case, it is useful for the instructor to be aware of what controllership effectiveness might mean. The major difference in the approach is how much of the effectiveness model is revealed to students before the case specifics are discussed.

Few controllership effectiveness models exist, and those that do exist are difficult to apply because controllership functions can vary across firms and few companies have clearly thought through and communicated their expectations of their controllers. But Sathe<sup>1</sup> proposed eight attributes of what he called an effective "strong" controller, one who places high emphasis on both service to operating management (part of the management team) and financial reporting/internal control (fiduciary) responsibilities. A strong controller model would seem to apply at C&S. The eight characteristics are:

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<sup>1</sup> V. Sathe, *Controllership Involvement in Management*. Englewood Cliffs, NJ: Prentice-Hall, 1982. An article-length excerpt from this book was published as: V. Sathe, "The Controller's Role in Management," *Organizational Dynamics* (Winter 1983), pp. 31–48. If the controllership effectiveness question is a focus for the use of this case, this article can usefully be assigned with the case.

1. Personal energy and motivation. (Is a doer. Takes initiative.)
2. Personal integrity and professional commitment. (Is the conscience of the organization.)
3. Accounting knowledge. (Has unquestioned technical ability.)
4. Analytical skills. (Is able to spot trends before they become a reality.)
5. Business judgment. (Understands the entire business.)
6. Ability to judge what is important to management and to make recommendations. (Thinks the way general managers think.)
7. Interpersonal skills. (Gets along with everyone. Is part of the management team.)
8. Ability to challenge management constructively. (Knows when to pick fights and when to give in.)

If this model is used, Don can be evaluated in terms of each of these desirable characteristics. Students will probably conclude that Don scores high in terms of criteria #1, 3, 5, and 7. The earnings management practices in which Don engaged may raise questions about his personal integrity (#2). His inability to convince management to discontinue the earnings management activities and to implement an alternative measurement system cast doubt on his ability to challenge management constructively (#8) and/or his ability to judge what is important (#6).

Alternatively, instructors who wish to let students infer a controllership effectiveness model can simply ask: "Was Don a good controller at C&S?" Or they can ask for the strengths and weaknesses of his performance. Students will assemble a list of points that looks something like this:

Strengths (evidence that Don was a good controller):

1. Clearly demonstrated good systems skills. Successfully implemented major changes in the firm's accounting information systems:
  - a. Chart of accounts
  - b. General ledger system
  - c. Accounts receivable system
  - d. Accounts payable system
  - e. Standard cost system
2. Made major cost reductions in controller's department (from 250 to 110 people).
3. Managed the company's accounting profit numbers skillfully.
4. Part of the management team. Attended the key meetings. Was rewarded for his performance in money, recognition, and autonomy.

### Potential weaknesses

1. Appeared to have little sense of fiduciary responsibility to parent company (Queen's Industries), at least at first.
2. Had distorted a key element of the company's intelligence system, the earnings trend numbers.
3. Apparently unaware of division-level earnings management practices until he did his fact-finding study.
4. Was not able to convince top management that they needed to implement a different form of financial measurement system and to fix the earnings management problem. Left company without solving the problem.

The students' overall evaluation of Don's effectiveness will depend on how they choose to weight these various criteria in importance.

### **Analysis of Question 2**

Question 2 focuses on the decision Don has to make at ETI. As he became involved in the company's budgeting process, Don learned that ETI had been reporting profits with "an extremely aggressive financial reporting strategy." Among other things, ETI management had been capitalizing many questionable expenditures (and some that were not so questionable).

Don's action alternatives and their consequences are probably as follows:

1. Make an accounting entry to write off what he has concluded are some inappropriate assets that exist because of past earnings overstatements. But if he made the entries without top management approval, he would almost certainly be fired. The NTC stock purchase and partnership deal would collapse. And Don suspects the company would probably fail, rendering his potentially valuable stock options worthless.
2. Discuss with the auditors what he knows. Let them force top management to act. This would probably have all the same consequences because top management would also certainly learn who "turned them in."
3. Delay. Continue to argue for less aggressive accounting. Don would keep his job and could cash in some of his options in two months. But he would have a potential legal problem if and when the scheme was subsequently discovered.

If Don forces a correcting entry to be made, he also has to decide how large a correction he will call for. He believes that the problem is at least \$5.5 million, but he might be able to make a smaller correction at first and follow-up with other entries later if necessary.

### **Analysis of Question 3**

Question 3 asks if earnings management is smart or ethical. No large body of evidence exists to link earnings management activities with economic outcomes, but there is some theory and a growing body of anecdotal evidence that allows us to make predictions about the effects. But before discussing the answer to Question 3, it is important for the students to understand what earnings management is.

I define earnings management as follows:

Actions taken to make performance look better than it otherwise would in the short-run, plus those engaging in them know the actions have no real economic benefits and may actually be quite costly in the long-run.

Earnings management comes in many forms, through choices of accounting policies, accounting judgments (e.g., reserves), the timing of sales, expenses and write-offs, and the moving of expenses above or below an important performance evaluation "line" (e.g., operating earnings, income before extraordinary items).

Earnings management is just one common and important form of gameplaying. Managers also play games with other measures, including balance sheet items ("window dressing"), sales, and quality measures. The basic points are the same about all of these forms of gameplaying.

Regarding the economics of earnings management, it seems clear that earnings management can lead to some short-term benefits for companies and their managers if the manipulative actions are not disclosed or are not well understood. If one believes in an efficient stock market and the actions are adequately disclosed to the market, then managers of public corporations probably do not derive a stock price benefit by, for example, boosting earnings. But most earnings management actions are not disclosed to the market. For example, in the Don Russell case, the market (smart analysts) would not be able to determine how many expenses had been erroneously capitalized, and the company could derive a short-term stock price benefit from managing earnings. Similarly, the company's loan prospects could improve with cosmetic financial statement improvements. And managers could benefit personally through bonuses, raises, and promotions.

While they may provide some short-term benefits, it is apparent that earnings management actions pose significant dangers for the long term. If discovered, they could cause a company to earn a reputation for reporting "low quality" earnings; analysts will discount anything the company says. They ruin a key element in the company's system of intelligence because it distorts (usually smooths) all the trend lines and hinders managers' abilities to detect problems early. They may create a gameplaying culture because there is the danger that the people who are promoted are those who are best at managing earnings. The effect will ruin the company's system of intelligence. And they present the possibility of leading to other problems, such as fraud. They may just be the first step down "a slippery slope."

Don Russell, himself, looked back on his 4-1/2 years with C&S with mixed feelings. He was proud of his many contributions to the company, but he regretted his participation in C&S's earnings-manipulation activities. This quote can be read to the class toward the end of the class to reveal the essence of Don's self-evaluation of his C&S performance (his answer to Question 1) and his current feelings about earnings management:

Not too long ago I was on top of the world. I implemented modern accounting systems in a company whose systems had been antiquated; I cut overhead costs sharply; and my accounting reporting skills made it possible for the company to continue its record of reporting steadily increasing earnings.

But all of a sudden I went from viewing myself as a hero—the team player whose skill in manipulating reserves got everybody their bonuses—to the greatest villain of all time, a large contributor to the company's problems. It dawned on me that

I was hurting our owner [Queen's] by feeding them erroneous information, and I was hurting the whole management control process of the company. The accounting manipulations shielded the operating managers from taking any flak for their mediocre performances. They were able to avoid taking needed corrective actions, such as cost reductions and attempts to understand why we were spending increasingly more marketing dollars on new products. If people don't have to face up to operating problems, they won't do it. It's human nature. If people have reserves, they don't have to face the problems.

I came to realize that if you allow the numbers to be manipulated, the company's whole management control system disintegrates. It has nothing to do with ethics. It's just that you can't conduct a business that way. You will avoid making the hard decisions you need to make. I don't think it's coincidence that C&S was taken over by Queen's, not the reverse, even though at one time C&S was larger than Queen's. C&S was gobbled up by a more successful international competitor.

While Don seemingly did not want to consider ethics, many people conclude that some earnings management practices are unethical. The key ethics words are probably potential or actual harm, fiduciary obligation to present financial statements that are not misleading, and fairness of presentation. (These words refer to different ethical reasoning models.) Regarding fairness of presentation, it is possible to debate whether earnings management is acceptable if the actions are disclosed in a footnote or whether the primary financial statements have to be "right." The ethical discussion can be short or extended depending on the students' (and the instructor's) backgrounds in ethics and the time allotted for discussion of the other issues in the case.

#### *Other Questions That Might Be Raised in Class*

1. How could the auditors have been fooled so easily at ETI? Or if they were not fooled, why did they go along with the aggressive financial reporting?

They seemed not to understand the relatively new and complex satellite communications business. They were afraid to take on the president, a former auditor with a good reputation and an explosive personality. And they did not want to put a client out of business.

2. Where was the ETI board of directors?

The ETI board of directors consisted of the chairman, president, previous chief financial officer, and owner of a company that was acquired (a personal friend of the chairman). In Don's opinion, this board provided "no control."

3. Do cash flow measures provide a better focus than accounting earnings measures? Are they less manipulable?

Don Russell argues yes. He believed that a focus on cash flow numbers would render the accrual gameplaying impotent. He also believed that the cash flow numbers could be used as the basis for forecasting future cash flows for the purpose of estimating entity values (e.g., division, corporation) under various decisions scenarios. But accruals usually have information content—they smooth the cash flow numbers. And cash flow numbers can also be manipulated as, for example, bill paying can be accelerated or delayed depending on the cash flow pattern a manager wishes to show. This measurement issue can be discussed in depth, or it can be skipped or brushed over quickly.



### After the Students Read the (A) Case

The (A) case informs the students that Don conservatively forced ETI to show a \$1 million loss for the quarter and he was quickly fired. This case again raises the issue as to whether the size of the correction was large enough. How much latitude should managers have? And it raises the issue as to whether Don should have reported the issue to the SEC. It appears that he accepted money (a year's salary) as a promise to be quiet. The ethics of this decision (extortion?) can also be discussed.

### Subsequent Events

Don Russell was unemployed for approximately six months. Then he took a job as division controller of a *Fortune* 500 company. He instituted some business process re-engineering projects and was quickly recognized as a top performer. A few years later he was promoted to an officer position at corporate headquarters.

ETI continued to report record earnings for over two more years, and the stock price continued to increase. In conversations with the case writer, Don Russell laments that his decision to leave cost him quite a bit of money.

Eventually, however, the scheme unraveled. ETI's auditors resigned in 1994 over "accounting disputes." ETI's chairman was quoted in the newspaper as being "astonished" that the auditors could have quit "over accounting issues which were limited to the first quarter of the year, without as much as a phone call to me." The story that came out, however, was that the auditors challenged a list of items accounting for more than half the first quarter profits reported by ETI. The company dropped these items but replaced them with new items (e.g., a newly remembered sale, a "re-jiggered" acquisition, a new look at reserves) that produced the same reported profit. When the auditors rejected some of these items, the company produced yet more items as replacements. Since these items produced higher total profit than ETI had set out to report, the company also came up with additional expenses. Obviously, the auditors lost confidence in management.

When the auditors resigned, the stock price plunged approximately 50%, but it recovered about 30% of that amount after the company released its response to the auditors' resignation letter. Shortly thereafter, ETI hired another "Big-6" firm as auditors. But two months later, ETI agreed to be acquired by a long-distance telephone company.

The auditors' resignation attracted the SEC's attention. After a three-year investigation, the SEC charged the ETI's chairman with securities fraud and insider trading. Also indicted were the president and chief financial officer. The SEC also filed cease-and-desist orders against a former controller and a former vice president of international sales.

The charge was that these executives inflated ETI's first-quarter 1994 earnings by 66% to meet analysts' expectations and that the chairman and president sold large blocks of stock while the inflated earnings were known only to them, thereby avoiding millions of dollars of losses. Several of the indicted executives were quoted as saying they would vigorously defend themselves against all charges and that they looked forward to being vindicated in court.

## **Pedagogy**

The major decision an instructor has to make in teaching this case is how directive to be, and the choice of style probably should depend on the type of students in the class. My preference is for an unstructured case because the issues come out naturally and easily with mature students. But an instructor could lecture through all or part of the case. For example, if students are not aware of the findings showing market efficiency with respect to publicly available data, the instructor should probably at least mention these findings.

Another option is to discuss Question 3 first (or even to put it first in the assignment). My feeling is that the discussion of controller effectiveness will be more productive before the class has gone on record condemning earnings management practices, as they probably will.

The (A) case should be distributed with about 10–15 minutes remaining in the class. Students can read it in just a few minutes, leaving time for additional discussion.

**Desktop Solutions, Inc. (A): Audit of the St. Louis  
Branch**

**and**

**Desktop Solutions, Inc. (B): Audit of Operations  
Group Systems**

**Teaching Note**

***Purpose of Case***

The Desktop Solutions cases were written to illustrate the roles internal audits can play in a management control system. Desktop Solutions is a disguised name for a company that is proud of its internal audit department. We approached this company so that we could write cases describing effective illustrations of internal audits. However, criticisms can be leveled at the audits the company chose for us to study.

***Suggested Assignment Questions***

1. What is the purpose of the internal audit organization of Desktop Solutions?
2. Identify and evaluate the major choices Desktop Solutions' managers have made regarding the company's internal audit organization.
3. Evaluate the audit of the St. Louis branch. Was this audit worth the cost? Should more such audits be done? Or fewer?
4. Evaluate the audit of OG-Systems. Was this audit worth the cost? Is this type of audit best done by an internal audit staff or by somebody else?

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Desktop Solutions, Inc. (A) and (B) case.*

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## Case Analysis

### Question 1

Desktop Solutions' internal audit (IA) staff serves several organizational purposes. The IA organization is independent of all line organizations, and it has a direct communication channel to the corporation's board of directors. Thus, it can serve as the "eyes and ears" of the board's audit committee. They can also provide special services for the audit committee or for Desktop Solutions management as needed.

Like virtually all IA departments, Desktop Solutions' internal auditors perform a compliance auditing role. They check to see if the company's policies and procedures are being followed.

Some IA staffs, including those at Desktop Solutions, have a broader charter that involves them in development, as well as testing, of internal controls, performance audits, and internal consulting projects. The (B) case illustrates an audit that goes far beyond a compliance audit. The audit of Operations Group Systems is a performance audit of a staff function.

Finally, and this is not mentioned in the case, Desktop Solutions' internal auditors provide services to the external auditors. They assemble data and prepare easily auditable schedules to save money on the audit. They are called on to perform these services because the internal auditors' hourly costs to Desktop Solutions are lower than those of the external auditors.

One could argue that if a company had a good management team, an internal audit staff would not be needed. No management team is totally effective and totally reliable, however. Corporations need the independence checks and control (and operational) advice that good IA departments provide.

### Question 2

The major decisions managers make regarding their IA function can be classified into three areas. First are decisions about **the size and type of internal audit resources** to have. Desktop Solutions has 15 auditors, which is not a small but probably typical number for an IA staff in a company of this size. Desktop Solutions is less typical though in another way because it employs internal auditors with diverse backgrounds, which include accounting/auditing, engineering, marketing, computer science, and liberal arts. This broad-background staffing choice, and the policy to rotate auditors through IA and then back out to a line organization, is closely related to the department's broad charter. Performance audits and internal consulting projects, particularly, require the audit teams to have a variety of management and technical skills.

Second are decisions about **the deployment of the internal audit resources**. Desktop Solutions' IA resources are deployed in two ways. They are assigned as part of an audit plan set at corporate and approved by the audit committee of the board, and they are deployed in response to requests from company managers. The (A) case reports that the requests for services was exceeding IA's capacity, so setting the audit plan was not easy. The cases do not describe the IA charge out plan, but students can be told that if auditors are sent by corporate to do an audit, corporate takes the charge. If the managers request IA services, then they pay for those services at full cost.

Third are decisions about the **management of the internal audit resources**. IA management involves many choices involving the IA organization, its reporting structure, its audit procedures, and the ways in which the auditors are trained and evaluated. In Desktop Solutions' case, the function reports to the chief financial officer. Most experts suggest that the IA function should report directly to the board of directors (or audit committee). Many company managers respond, however, by saying that the reporting to the CFO is for administrative purposes only, whilst the IA department really serves and takes its direction from the audit committee. They add that the CFO reporting is necessary because the audit committee meets only periodically. At Desktop Solutions, the audit committee of the board approves the IA plan, so the administrative reporting to the CFO is probably not a problem.

The cases do not provide much information about the IA audit procedures except that the audit steps are listed for both of the audits described. These steps can be evaluated in the discussion of each of the specific audits.

The cases do not provide much information about auditor training, career progressions, and evaluations, either. If instructors wish to focus on these issues, they will have to supplement the case materials.

### Question 3

The audit of the St. Louis branch took six auditors two months to complete. Assuming an average auditor salary of, say, \$60,000, plus 100% departmental overhead, the direct cost of this audit was approximately \$120,000. The indirect cost caused by the burden placed on the branch, may be several times the direct cost. So, the benefits of this audit should be compared with a rather sizable cost.

Another way of looking at the costs is in terms of the total IA resources available. With a staff of 15 auditors, Desktop Solutions has 180 auditor-months available each year. The St. Louis branch audit took 12 auditor-months, or 6.7% of the total IA resources. But St. Louis is only one of 52 branches (1.9%). And this does not consider other parts of the organization (e.g., manufacturing, staff groups). So, this was a heavy allocation of resources to the St. Louis branch audit.

The St. Louis branch audit had some strengths. The objective was well-defined; the auditors focused most of their attention on areas which they expected to pose the greatest problems; the auditors did extensive testing in the areas identified in the audit plan as important; and the auditors provided the branch manager with an extensive list of 46 recommendations.

However, many questions can be raised about the St. Louis branch audit:

1. Why were 46 recommendations made? This is probably too many. A long list almost inevitably lists symptoms. Auditors should have looked instead for the underlying problems—the lack of controls.
2. What is the purpose of the flowchart (Exhibit 5)? It does not address the process and highlight the problems.
3. Why did the auditors do so much work? Do the risks and rewards justify the cost? For example, it does not take an examination of a sample of 20% of the inventory items to know that the inventory records are not reliable. The key question is why are the inventory records

not reliable? The auditors should be trained to look for the problem. Could the auditors have stopped the audit early? Did they have to go to a total conclusion?

4. What is the purpose of the audit grade (e.g., “unsatisfactory”)? It does not address the real problems, and management does not seem to be forced to react to even a very poor grade.

The responses of the parties involved provide the best indicators that the audit of the St. Louis branch was not a successful audit. The auditors’ reaction seems to be, “Aha, we got you.” Management’s response seems to be a shrug of the shoulders. There is no evidence of a spirit of cooperation to improve. This audit seems merely to confirm what was known before, from the audit two years ago. This is not a good result, particularly given the large cost of the audit. Desktop Solutions has a problem that extends beyond the IA function—managers (if the St. Louis branch manager is representative) seem not to be forced or otherwise motivated to respond to the audit findings to improve their operation. This problem may be caused by the matrix structure in the branches. It is not even clear which of the three branch managers the audit report should be addressed to.

An issue that could be raised is whether audits like the St. Louis branch audit should be done on a scheduled or surprise basis. Scheduled audits allow managers to clean up their problems before the auditors arrive; surprise audits allow the auditors to see the operations in their “normal” state. This case does not well motivate this discussion, however, because the St. Louis branch audit was scheduled, but the impending audit did not cause managers to address their control problems.

#### **Question 4**

The audit of OG-Systems took 18 auditor-months for an approximate direct cost (not including the burden on the OG-Systems unit) of \$180,000. (Two auditors spent approximately 1,600 hours each on the entire project. There are about 180 working hours per month; 3,200 hours / 180, ~18 months. At an average salary of \$60,000 per year, this is circa 90,000 plus 100% departmental overhead, or 180,000.)

What benefits were provided? OG-Systems management was pleased with the results of the audit. Don Lindsay got an independent evaluation of the problems, and the audit report could help him politically by convincing his personnel and top management that changes needed to be made.

However, one could argue that this audit did not contribute anything new. It merely confirmed Don Lindsay’s own diagnosis. Plus, it did not get to the real problem in OG-Systems, the fact that at least ten different systems are in place. A good audit/consulting team should be able to re-engineer the OG-Systems functions reasonably quickly and provide some significant savings. Don Lindsay should bear a considerable amount of the blame for this audit failure; he allowed the auditors to leave without making recommendations.

Some students may be critical of the proportion of time spent scoping the planning of this audit engagement (a total of 45% of the time). This is probably necessary, however. The planning helps the auditors understand what they are expected to do, what they will find, what they should test. The proportion of time spent in the scoping and planning stages will be particularly high in engagements that are unique, like the OG-Systems audit.

## **Pedagogy**

My experience with the case suggests that the discussion flows quite well by following the suggested assignment questions in order. Students will likely not be critical of the audits, however, and the instructor will have to challenge the students to bring the critical points out.

I like to leave the students with the following thoughts:

1. Internal audit is no substitute for day-to-day control, but it is one tool in the manager's control kit.
2. Internal audit is an invaluable resource for audit committees of boards of directors. If the Arrow Motorcar Corporation (or any other board of directors failure) case has been discussed, you can point out that internal audit was an important resource that the Arrow board was lacking.
3. Like controllers and board members, most internal auditors have to wear "two hats"—they provide an independent control role, but they also provide services for management, particularly if the charter of the internal audit function is defined broadly. That is quite clear in the (B) case.
4. There has been a major change in the IA function in most companies in the last 20 years. IA used to be dominated by compliance audits. Accountants whose main talent was tremendous attention to detail populated the staffs. They were the "policy police." But major scandals attracted attention, and many companies saw increased and new risks forming (depending on industry). Now IA is clearly a profession. The US Institute of Internal Auditors has maintained its certified internal auditor (CIA) program since 1972. The IA function has become more important in most companies; it employs better people; and it offers the auditors broader responsibilities. IA is actually a good first job for a new college graduate because they get to see a lot of different areas of a company, and salaries are competitive.
5. A relatively recent internal audit trend has been for corporations to outsource their IA function. Public accounting firms are offering this service. The outsourcing makes IA more expensive by the hour, but the corporations can buy only the services they need. There is no downtime. This outsourcing is controversial when the corporation's own external audit firm is selected to perform the IA services. Does this compromise audit independence? One perspective on this issue in one country by one professional association can be gleaned here: <https://iia.org.uk/policy/publications/internal-audits-relationship-with-external-audit/>.

## Andrew G. Scavell, Chief Risk Officer

### Teaching Note

#### Case Objectives

Whereas this case can be used to motivate discussions of a number of secondary but related topics, including planning and budgeting, key performance indicators (KPIs) and their analog—key risk indicators (KRIs)—as well as the firm’s bonus plan, the key thrust of the case should be on risk management systems and processes, and the role of executives and managers, including the Chief Risk Officer (CRO), in the management of risk. Specifically, the case can be used to explore the following learning objectives:

1. To analyze the relationship between competitive strategy, opportunities and threats as well as strengths and weaknesses, and risk management systems.
2. To study how an enterprise risk management (ERM) system came about and is used in a specific setting in a given company facing a moderate but not excessive “VUCA world.”<sup>1</sup>
3. To understand the role of executives and managers, including or especially the Chief Risk Officer’s role, in the management of risk and proper risk recognition, identification, assessment, and mitigation.
4. To recognize the relationship of risk management to planning and budgeting processes, and how ERM is argued to provide, or not, a necessary context for both strategic planning (setting of organizational objectives) and operational planning (budgeting and strategy execution).

Objectives 1 and 2 allow to illustrate risk management in action by introducing basic risk management rationales, approaches, processes, and tools. Across Objectives 3 and 4, students should develop an understanding of the role of the CRO and the relationship between risk management, strategic planning, and control. Objective 4 specifically, however, drives home the idea of risk management as a *management control* process.

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<sup>1</sup> VUCA is an odd acronym used to signify a volatile, uncertain, complex, and ambiguous environment.

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*Professor Wim A. Van der Stede (London School of Economics) prepared this teaching note for the sole purpose of aiding classroom instructors in the use of the Andrew G. Scavell, CRO case. It provides analysis and questions that are intended to present alternative approaches to deepening students’ comprehension of business issues and energizing classroom discussion.*

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On this latter point, formal control systems such as planning and budgeting are designed to allow management to monitor and reward organizational performance (through a combination of predominantly *action control* and *results control* features embedded in such systems). The extensive processes that most firms beyond minimal size have in place to plan and budget contain elements of action controls by allowing so-called *pre-action reviews*. They also contain an important *results control* element by keeping actions and decisions consistent and focused on the achievement of the organizational objectives and targets laid down in the various plans and by providing appropriate incentives when achieved. This, however, assumes a degree of stability around “the plan.” Risk management in this context can thus be seen as a means to explicitly consider more uncertainty in the development and execution of the various strategic and operational plans.<sup>2</sup>

It is therefore not helpful to try and draw a strict line between risk management and management control. Instead, as the case illustrates, risk management is principally part of a management control process in an inevitably uncertain environment. This does not imply that risk management cannot have its own set of approaches and tools, which are also illustrated in this case.

That said, the recent increasing prominence of risk management as a seemingly distinguishable organizational process probably has much to do with regulatory pressure on companies to be seen as being risk conscious (and “in control” or “resilient”) as part of good corporate governance. The case mentions the Exxon-Valdez “disaster” as a trigger for increased regulation in this specific industry. Other industries have all had their own such triggers, often stemming from a major “disaster” or presumed governance “failure.” Ironically, though, such external, regulatory pressure to engage in risk reporting may make some companies more *risk compliant* instead of necessarily more *risk conscious*, although both should not be mutually exclusive. Even though regulation may nudge companies into some processes they may otherwise not have considered or dreaded, and even though regulation inevitably adds costs (and bureaucracy), the ideal remains that companies can work with or within such regulatory requirements to develop internally effective risk management processes from which then effective compliance and/or disclosures follow in otherwise substantially well-governed and risk-conscious companies. In other words, the ideal is that in the context of increased scrutiny, the regulation is stimulating instead of stifling. The case has only some subtle flavor of this important balance or tradeoff. For example, on several occasions Andy Scavell, the CRO, remarks that he does not wish risk management to be a mere bureaucratic compliance exercise.

## **Case Company**

The setting is a shipping company (which likes to describe itself as an “integrated transportation solutions” company) with quite a bit of detail in the case about the business and its context, key uncertainties, and examples of both plausible potential risks as well as materialized risks that the company faced in the past. Even though this type of business is rather rarely the subject of a case, shipping (or whatever other fancy moniker is used to describe it) is a crucial sector for global trade. Students will have heard or read about the Evergreens and Maersks of this world, with which the case company competes through what Michael Porter would call a “niche strategy.” The case has all the details to pique the students’ interest in the business and sector, especially because it is set in a period of significant industry cyclicality spanning the most recent decade, which will appeal to students of the analyst type who typically

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<sup>2</sup> See, for example, W. A. Van der Stede and T. Palermo, “Scenario Budgeting: Integrating Risk and Performance,” *Finance & Management*, no. 184 (January 2011), pp. 10–13.

are keen to demonstrate their grasp of peculiar industry dynamics (such as, in this case, strategic choices between specialization/diversification and spot/contract business; the risks of customer capture; the key tradeoffs between asset utilization and operating cost efficiencies; and the tendency for major capital investments (in vessels) to be dis-synchronous with the economic cycle, just to name some). And although the company name is disguised, the setting is real, so students can benefit from secondary learning about the industry and business.

The industry has faced increased regulation over the past two decades, perhaps initially, or still, more health-and-safety than governance-related, but where, as mentioned above, Andy seems intent on ensuring that LP&F is increasingly resilient rather than just merely compliant.

### ***Further Risk Management Cases and/or Readings***

Instructors seeking to have more than one class period focused on risk management can use this case in conjunction with the Entropic Communications, Inc. case (in this book) and/or Enterprise Risk Management at Hydro One (a Harvard case by Anette Mikes). When using two cases, Entropic should be taught first, focusing on the more technical aspects of implementing ERM. But even instructors who use this case only and/or instructors who may be less familiar with the topic of risk management may find the teaching notes of the other two cases informative and useful to enhance their coverage and/or to further embellish or tailor the discussion beyond the indicative suggestions offered below.

Depending on the students' backgrounds, it can be useful to assign a background reading on ERM, such as the COSO's 2004 *ERM Risk Management—Integrated Framework*, which since 2014 is undergoing a review to “recognize the increasing importance of the connection between strategy and entity performance” ([erm.coso.org/Pages/default.aspx](http://erm.coso.org/Pages/default.aspx)). There is also a video on the COSO ERM Framework update ([erm.coso.org/Pages/video.aspx](http://erm.coso.org/Pages/video.aspx)). Pertinent to the thrust of this case, the revised COSO ERM guidance is expected to be titled *Enterprise Risk Management—Aligning Risk with Strategy and Performance*. Another good resource on risk management is available through the Institute of Internal Auditors at [www.iaa.org.uk/resources/risk-management](http://www.iaa.org.uk/resources/risk-management).

### ***Suggested Assignment Questions***

1. What was the key rationale or impetus for the risk management drive at LP&F?
2. Was Andy the right person to drive this risk management effort? Was ERM eventually being formalized through the right role in LP&F? Which are the critical tensions in this role? Was Andy best placed—either through prior experience and/or through the way the new role was conceived—to deal with these tensions effectively?
3. Describe in a concise, well-structured format the key tenets of the risk management process that Andy had devised. Was this process effective? Accepted by all? Complete? Overall, what are the strengths and weaknesses of the ERM process?
4. Do you reckon the company realized the benefits of ERM as envisioned by Andy and/or the board? Why or why not?
5. What changes, if any, would you suggest for making the ERM process at LP&F more effective?

## Case Analysis

### Assignment Question 1

The first assignment question asks students about the key rationale or impetus for the risk management drive at LP&F. The case is not focused on the financial reporting approach to risk (of which Entropic has some flavor); instead it is focused on managing risk and embedding it with strategy, planning, and decision-making from the bottom of the organization all the way up to the board.

That said, the primary motivation at LP&F was a desire to help the board of directors fulfill its fiduciary obligation to monitor the company's risk management practices. But the first person charged with getting this going—Andy Scavell—wanted it to be more than just reporting-focused, more than just compliant with general guidance on governance, and more than just of interest to the board.

The connection with strategy also implied, in Andy's view, that risk management should not be just about *downside risk* (preventing bad things from happening—*dangers*); he wanted it also to include *upside potential*—(the company's ability to take on business *opportunities*). But for it to be relevant as pertaining to risk management, both the downside and upside, however, must have an element of *uncertainty*. This is important for students to appreciate as it is the common feature of uncertainty on both the upside and downside that is central to the notion of risk. The word "risk" linguistically seems to evoke a negative connotation, and hence a tendency to be focused on the downside or dangers (or "risks"), but it is the appreciation of uncertainty that I think students should recognize as pivotal to risk management.

Despite these "grander" objectives, students may have spied perhaps still a bias in this case toward risks that are often "Health & Safety" related (e.g., as in the example of the floating warehouse). These are *known knowns* for the company (and this industry): accidents have happened and will inevitably happen again. These must therefore be mitigated, but there is a good basis from past experiences to conceive effective mitigations and assess the costs. When done well, as there is evidence this company does, this is even likely to prove effective through an improving health and safety record over time (although perhaps at a decreasing rate). This is something the company should be unrelenting about. It is very important, but in terms of "risk challenge" it is the low-hanging fruit.

Should the company spend more time and attention on *known unknowns*? The following quote suggests it should, where "[...] limited management time was available to focus on events that had not yet happened, but if they would, whose impact could be significant." This clearly fits the definition of known unknowns: events the company knows it does not know, as opposed to an even more challenging category of *unknown unknowns*—events they don't know they don't know.

### Assignment Question 2

The second assignment question asks students whether Andy was the right person to drive this risk management effort and whether ERM was eventually formalized through the right role.

Why Andy? Andy had worked his way up in LP&F through the so-called Finance function, all the way up to Group Financial Controller (which reports to the Finance Director,

which is the common term in the UK for what is more commonly known as the CFO in the United States). Andy therefore would have been very well known to the members of the board and would have regularly been called upon by them (such as by the Chair of the Audit Committee) for information or clarification on financial reporting issues, say. But to that point, Andy would not have been an executive member of the board of directors (as the CFO usually is). By being promoted to Head of ERM (which eventually was changed to CRO), Andy became a member of the company's C-suite (rather than reporting to someone on the C-suite, the CFO).

Hence, Andy had had frequent contact with the company's board of directors, and he also had extensive experience in dealing with all matters (mostly) financial related to external reporting and internal decision-making. He also had prior experience in the treasury function, thus giving him a good understanding of all matters related to financing. These roles are generally said to give their incumbents a broad understanding of the business, which seems suitable for someone taking on risk management, as opposed to someone whose prior experience may have been located more in the operational side of any given line of business even up to a very high managerial level.

Regarding the nature of the CRO role, it is interesting to note that it does have a similar tension as the CFO or Controller role—that of *involvement vs. independence* or *partnering vs. policing*. Given Andy's tenure in the Finance function, this should come as no surprise to him and he should be deemed capable of being able to navigate this important tension. Indeed, he is quoted in the case as saying that an effective CRO should “help management challenge themselves” without “going native.” The CRO should be a trusted partner of the board and management “without being their ‘patsy.’” CROs should not be responsible for identifying all the key risks and their applicable mitigations; instead they should ensure that management has appropriate processes and procedures in place so that the company can effectively manage its risks (such as by way of scenario planning, risk mapping, and other standard risk tools). Andy labels this role as that of a “non-executive manager” where the first term alludes to the required independence and the second to the ability of risk managers to “work with the business.” A CRO is someone who constructively challenges management.

Some students will argue that the ERM effort should be driven by the CEO or CFO. Certainly, the CEO must agree (with the board) that the ERM effort is worthwhile or it will not go far (or be a source of conflict between the CEO and the board, and through that route also become short-circuited, compromised, or perfunctory). In other words, the mandate has to come from, and be agreed, at the highest organizational level. But most CEOs are quite busy and are not interested in leading (sometimes quite tedious) ERM efforts (particularly of the regulatory type) unless their style is very process oriented. But Andy would argue that this is not just about being “too busy”—instead, it is about the need for *proper challenge by someone who is close but not native to executive management*.

ERM efforts in some companies are driven by the CFO. This could also have been the case here. But because of both the job being quite substantive, and also perhaps because there was a timely opportunity (or need) to promote Andy to the C-suite without needing to replace the incumbent CFO, there were both substantive and pragmatic reasons to consider Andy for this role. That said, having worked with Andy on developing this case, I can attest that he had a keen interest and enthusiasm for ERM, which in the end is one of the most important qualities that an ERM *champion* must have given the *mandate* from the board.

Andy clearly is also *reflective*. A good example of his independent, reflective views is expressed in the case in the discussion of risk appetite, among other places. In this discussion, and elsewhere, it is also clear that Andy *does not see risk management as the be-all end-all*.

Instead, he sees risk as being subjugated to profit (“firms don’t seek risk, they seek profit, but the pursuit of profit comes with risk, which has to be managed”); he puts strategy before risk; and he does not see risk as a constraint but as something that needs to be carefully weighed and balanced in light of the company’s strategic objectives and operations. Being the humble, intelligent practitioner that he appears to be is likely helpful in getting ERM accepted, as opposed to being pushier and being perceived as a “flogger of the latest fad.”

To repeat to a great extent, but some points that come out of this discussion could be noted on the whiteboard under summary rubrics like:

### **What makes Andy an effective CRO?**

- He is independent but understands the business ...
- ... through significant past experience in the Finance function.
- ERM is a mandate from the board, and they have entrusted this to Andy.
- Andy seems to get on with the board and top management.
- Andy gives careful thought about what ERM is, could be, should be; he appears to be a “reflective advisor” rather than a “glib salesman” with a hammer in search of a nail.
- Andy is not a risk specialist but he has strong views about it ...
- ... Andy’s views of ERM reveal his belief that successful CROs need to take a broad perspective and need to have everyone “embrace” risk management.
- This requires communication and persuasion (political) skills in order to secure formal high status (to be at par with other C-level executives—See **Exhibit 3**) and to gain access to key stakeholders, funds, and information (see role description in **Exhibit 2**). From the case it is not clear that Andy has all these skills or traits, but he seems to have the essential ones if not necessarily all the desirable ones.
- But was he perhaps still too much of a “finance guy”? Several examples he gave were from the finance sphere (e.g., capital expenditure risks, Monte Carlo simulations of discounted cash flows). On the other hand he was quite open to subjective evaluations (i.e., not obsessed with quantification) of key risks.

### **Assignment Question 3**

The third assignment question asks students to sketch the ERM (implementation) process. This should include the following elements, some of which having to do with *principles* and others with *pragmatics/implementation*:

#### **Principles (the “what?”)**

- The risk management process or ERM for short had “to *provide assurance* that the key risks of the group are being appropriately identified, assessed, managed, and monitored—that management had appropriate plans in place to reduce the level of residual risks to an agreed level within an acceptable timescale” (from **Exhibit 2**). This essentially had to do with “supporting management and the board in discharging its corporate governance

responsibilities with regards to the identification and management of risk” (also from **Exhibit 2**).

- For this predominant governance purpose of ERM, there had to be *effective reporting and execution* “to provide management and the board (Audit Committee) with regular reporting summarizing risk management and assurance reviews and findings; including progress in implementing agreed recommendations as well as an overall assessment of the control environment and how this is changing within the group” (from **Exhibit 2**).
- But risk management also had to be *strategy-driven* and include both risks and opportunities.
- And risk management had to be *effectively embedded* in the organization, horizontally and vertically ... and had “to ensure that it had all the key internal controls in place and operated effectively in all key business processes” (from **Exhibit 2**).

### **Pragmatics/implementation (the “how?”)**

- The center piece of ERM at LP&F designed to try and meet the above principles of effective risk management was undoubtedly the group *risk register* (**Exhibit 4**) which contained a dozen key risks categorized into financial, strategic, organizational, and operational risks, as well as ratings of each identified risk in term of *likelihood* and *impact* using rather well-defined scales both at the level of gross and residual risks, where this was then visually depicted using these numeric values onto a *heat map*.

According to Andy, this represented the “horizontal embeddedness” of risk *across all the businesses* via its articulation in the strategy for the group.

- “Vertical embeddedness” of risk was achieved *bottom-up*. The main planning tool in the decentralized entities (the trade offices) was, as is typical of most firms’ management control systems, the *budgeting process* and its accompanying Quarterly Business Reviews (QBRs) and, more uniquely, the “Must Achieve Plans” (MAPs), of which risk considerations were an integral part.

As is typical, budgets for each trade office were drawn up each year in consultation with the Head Office to ensure alignment with the firm’s overall strategic plan. Budget targets were fixed for the year, but progress against plan was scrutinized in great detail in the QBRs.

Less typical, at least in name, were the so-called MAPs (see **Exhibit 5**). These were essentially “local” strategic plans that, crucially, covered both opportunities and risks as well as elements of risk assessment and mitigation as part of estimates of the likelihood and timing that a given “program” would be achieved.<sup>3</sup>

- Andy as the CRO oversees that these risk discussions are taking place, provides guidance, advises as appropriate and when asked, consolidates, and reports. Andy’s *advising* was mainly for the benefit of management at all levels, whereas his *reporting* was mainly to the board. Reporting inside (or up and down) the management hierarchy was part of the

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<sup>3</sup> The closest analogy of this in other companies is what is described in Management Control Systems textbooks as “Programming,” which involves “capital budgets” and which sits between the corporate strategic plan and the business unit (operating) budgets.

strategic planning, programming, and budgeting process and not actually a separate activity conducted by the CRO; instead, it was the CRO's responsibility to oversee it and advise.

- Andy thus had to make sure that the department or trade office heads formulated risk assessment/mitigation plans and was responsible for risk reporting to the board mostly by way of the risk register and its accompanying heat maps.
- Andy was also responsible to ensure that the risk register was regularly updated in terms of the identified risk (which involved removing and adding risks) as well as their ratings (including regular reviews of the ratings of recurrent risks). This followed the "rhythm" of the strategic and operational planning processes in relation to which the risks were relevant.
- The risk register was part of the papers of *every board meeting*, in addition to it being discussed at least five times during the year with senior management in *Risk Review meetings* which Andy conducted.

The question then also asks students to evaluate this process:

### **Strengths/features**

- All managers up and down the hierarchy are involved in risk management.
- The process includes face-to-face meetings, not just form-filling, giving ERM an "equal seat" around the table: it focuses people's attention on risks, it encourages discussion, it adds challenge to the plans, it makes the planning process more complete, and it enables learning.
- What is required in terms of identification and assessment of the risks seems well within the grasp of most managers, or it could be assumed to be, although maybe the risk ratings are more challenging?
- There appears to be an appropriate "scaling" or synchronization of risk analyses by level:
  - *senior* management—*strategic* planning—*risk register*/heat maps
  - *lower-level* management—*operational* planning (programming and budgeting)—risks considered as part of *MAPs*

The CRO advises, coordinates, consolidates, and reports. He also cajoles and challenges.

- Indeed, the CRO is a coordinator, not a decision-maker—responsibility for risk management lies with the management teams.
- ERM encourages a forward-looking approach, getting managers to think over two-to-three year horizons (as opposed to always, or only, one year ahead as characteristic of budgeting rounds—MAPs are a way to transcend the annual cycles).
- Strategy comes first, not risk—"management develops the strategy of the organization first, and then assess the related risks" where the aim is for management to understand/assess the risks that arise from executing the strategy as opposed to starting from "the risk they would be prepared to take to determine strategy."

However, some students might rightfully surmise that this is perhaps merely an “academic” point? If the risk is deemed too high, wouldn't the strategy be revised or the program be ditched?

- The process should encourage candid discussions, although this has to be taken at face value because the case does not really provide any direct evidence to substantiate that it reliably does.

### **Weaknesses/concerns**

- Do the risk discussions add more time, and thus cost, to already and generally “onerous” planning and budgeting cycles? My estimation is that the incremental cost is relatively minimal, although this is all hard to quantify. Some maintain anyway that “planning *is* managing” and, hence, if the risk considerations improve the planning, then that should be time and effort well spent. Form-filling and bureaucracy appear relatively limited.
- The reporting to the board through risk registers and heat maps inevitably add “paperwork” and costs, but what is the alternative? “Not doing risk management” as a board of a company this size and in this sector simply is no longer a defensible position. Moreover, and as above, it appears that the risk reporting enhances the information available to the board and the quality of their (strategic) discussions. Of course, there is the direct out-of-pocket cost of having a CRO, but the role seems to have been generally well-conceived and appears to “add value” in large part because ERM was never just conceived as a response to a greater demand for compliance, although it certainly also serves this function.
- How credible is Andy's claim about the regular updates and revisions of the risks in synch with the (strategic) planning cycle? Consider that he went on to state that “the risk register was actually quite stable as, indeed, if the selected risks were reliably key risks, and if the firm's business model did not change drastically, as it didn't, then one should not expect the group's risk register to change drastically in any given year.” Do we believe him or is this just “code” for what many risk registers eventually become: rather stale and obsolete, or if not that, prone to complacency? If so, is such a mere “laundry list” of risks much better than no risk register? Does it create an “illusion of control” only?

To be fair, one potent example that counters this alleged concern is that of piracy risk. In this sector, one would not expect this one to be easily dropped from the risk register. The fact that they did drop it suggests that they likely “know what they are doing” and that they must be confident which risks they have a good handle on. If that is the outcome of a risk management process, then one could call it a “good” risk management process!

- How reliable are the risk ratings? They do involve quite some “guesstimates” and such subjectivity of the risk assessments is dependent on the quality of the managers' judgments. But what would be a (better) alternative? At least there seems to be some, or sufficient, discussion of the risks and their ratings, and these are also regularly updated as new information becomes available or the nature of the risk is estimated or deemed to have changed.

It is interesting to point out to the students that Andy reckoned that “determining the *probability* of an event was very subjective [whereas] the *impact*, if an event occurred, was much easier to determine.” Would that apply to other contexts/industries/firms as well? I do believe the answer is likely “yes”—although this is a conjecture: estimating impacts/costs is easier than estimating likelihoods.



Moreover, this company uses a rather peculiar and perhaps quite unique feature of assessing gross risks, followed by considering proactive controls, to then assess or re-assess the residual risk. Of course, one could say that this amounts to merely simple arithmetic where gross risk – proactive controls = residual risk. But that is too simplistic a characterization of the *actual* process. Indeed, the reality is not just a matter of working out this simple equation. In actual fact, and *as a process*, it requires that managers not only discuss and rate the initial risks; it also requires them to discuss and rate the proposed mitigations; to then still having to discuss and assess where this leaves them in terms of any remaining risks. This ensures that the risks are discussed in a more holistic way. Given that they have introduced an equation with three terms implies that each term must be considered, which *as a process* involves a degree of interactive discussions and considerations beyond merely doing some sums.

- Despite Andy's emphatic claims, it seems as though managers worry more about downside risk, less so about opportunities. Is such bias inevitable even if one is quite conscious of it?
- No link of risk with performance measurement. Is Andy right that KRIs are essentially the same as "inverted" KPIs (or vice versa); that is, if any KPI shows signs of distress then that should raise the same red flag as an equivalent KRI would? I guess that is true for the performances that are listed in that section of the case, but what "measure" would alert them to a potential compliance failure, say, which is a key risk shown in the excerpted risk register in Exhibit 4? Surely high personnel turnover or an unusual high proportion of inexperienced, new personnel might be red flags. These things can be measured. Couldn't therefore certain measures or reasonable proxies that allow monitoring the listed proactive controls be useful as "risk measures" (as opposed to "performance measures")? They could incorporate at least some objective risk indicators (e.g., number of safety violations). That said, even in the absence of such measures (at this stage of the company's ERM development), there is value in the process even without the measures. Some would go further and say that "*the value is in the process, not in the measures.*"
- Is ERM sufficiently accounted for in the respective managers' bonus plans? There seems to be quite some (subjective) weight given to the achievement of objectives in the MAPs, but there is no evidence that risk is explicitly or separately considered in those evaluations. Could or should managers be rated based on how knowledgeable they are about risk? However, being less explicit might be a feature rather than a concern because (1) conceptually, risk and performance are supposed to be the flip sides of the same coin, and (2) explicitly rewarding "risk performance" might ruin the risk discussions (e.g., it may make the managers unduly coy or risk averse) and/or it might bias their ratings of the identified risks.
- Whereas it stands to reason that it is crucial to ensure that risks are considered with reference to strategy, it is also important to appreciate, and make explicit where applicable, that risks are interconnected not only with strategy but also with each other where problems in one area may have spillover effects on other areas. Clearly, not all of the risks at LP&F are wholly contained within individual entities. But is the ERM process in LP&F sufficiently potent to bring together diverse views from throughout the organization and to create a shared understanding of threats and opportunities across its various businesses and entities? My estimation is that this heavily, perhaps almost exclusively, depends on Andy's capacity to link the discussions and bring the information together, or, in short, his ability to connect the dots. Is this a vulnerability? The ERM process seems more effective in encouraging managers to anticipate risks that might be relevant in the foreseeable future *in their respective businesses* and in channeling information from the lower levels of the

organizations to the top (through the usual quarterly and annual planning and review processes) than it is in connecting risks across the businesses and the various organizational entities. Although this should be alleviated to the extent possible, this is not an unusual weak spot of most risk management processes.

#### Assignment Question 4

The fourth assignment question asks students whether or not they believe LP&F realized the benefits of ERM as envisioned by Andy and/or the board.

I believe that the conclusion should be largely favorable. The board has better information, which it takes at least note of at every board meeting. We don't know from the case how extensively this information is being discussed at (every) board meeting, but it is hard to imagine that if there were red flags that these would not surface and at least get some hearing. I admit that this is a rather glum (but not necessarily unrealistic) view of board meetings, but even in this scenario, there is an improvement because the risk information seems well prepared and present. *Risk has gotten on the agenda!*<sup>4</sup>

Furthermore, the risk information comes about in a rather bottom-up fashion. The process also does not appear to be too afflicted by ulterior motives triggered by bonus or career concerns. There is some risk that the risk discussions will become more humdrum as time wears on, but ERM is still relatively new in this company for this not to be a major concern yet. Of course, much will depend on a "strong CRO" to keep the process active, functional, and honest. This is, however, not an unreasonable expectation in this organization because risk has become part and parcel of any and every planning and review process at all managerial levels. LP&F seems so far to have been able to keep risk interesting by making it part of the regular business review processes. *Risk has transcended the realm of mere paper pushing!*

Risk management in LP&F appears to strike a reasonable balance between quantification and narrative (as shown particularly in the template used for the MAPs). Rather than being too preoccupied about quantification, *the process is primarily geared toward directing managerial attention and stimulating risk awareness*. (Some might suggest that there could actually be more quantification.)

Andy, however, believed that risk management in organizations often fails (or falls short of expectations) due to several reasons listed in the case. He deems these likely inherent to human nature and attributable to behavioral biases, such as those related to the assumptions that are being made; the biases present in assessing the severity of risks; the difficulty to drill down to the likely root causes of the risks; and the near-impossibility to "imagine" the unknown. Andy's list can be compared to various structural, managerial, and cultural issues in the literature listed as antecedents of risk, including:<sup>5</sup>

- Rigidities of core beliefs
- Managerial distractions

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<sup>4</sup> If one is less bent on compartmentalizing "risk" as its own separate issue, one could argue, hopefully rightfully so, that virtually all of the time that board members spend in their meetings is focused on risk, particularly strategic risk!

<sup>5</sup> I took this indicative list from Mikes, A. (2014), *ERM at Hydro One (A)*, Teaching Note No. 5-110-086.

- Disregard for the views of outsiders
- Lack of regulatory compliance
- Difficulties in assembling critical information

### Assignment Question 5

The fifth and final assignment question asks students which changes they might suggest for making the ERM process at LP&F more effective. This, however, is unlikely to yield much at this stage of the discussion given the likely extensive preceding discussion of the issues for which remedies may already have been offered. I therefore call this the “hot shot” question—that is, the question that might allow some students to make some final major point (or reiterate their pet peeve, which should be diplomatically cut short by the instructor if it is merely repetitive). All in all, this question could be quickly over with (if the session is running out of time), or could be used to have any further inputs from the students (if there is some time remaining and there are still some gaps in the analysis).

Here are two possible issues that I can think of that students could still possibly identify (but, of course, there may be others):

i. *Big data*

To counter the subjectivity of risk assessments, Andy suggests that “big data” would be useful but that in this industry, unlike in banking, there is very little “big data.” Note however that Andy may be wrong in his assessment of the usefulness of “big data” in the banking sector per the following quote from *The Economist* (*Data, data everywhere*, Feb 25, 2010):

“During the financial crisis it became clear that banks and rating agencies had been relying on models which, although they required a vast amount of information to be fed in, failed to reflect financial risk in the real world. This was the first crisis to be sparked by big data—and there will be more.”

Later in the case he then muses that “[...] if we know the location of every vessel headed for a given port, and we have data on wind speeds, navigation routes, weather patterns, stevedore schedules, and what not, couldn’t we predict and accordingly adjust better?” Certainly, but that seems to relate to an *operational* use of “big data.” Andy then goes on to state that “maybe we’d learn something about ‘black swan’ risks, too, such as impacts of global warming on our business and port operations.” This would be a use of “big data” for *risk* identification purposes. Is this realistic?

ii. *Main focus on downside risks*<sup>6</sup>

Despite Andy’s strong views LP&F’s ERM processes seem primarily effective at identifying and prioritizing the ‘bad’ or ‘downside’ risks and at laying out the steps needed

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<sup>6</sup> This section is adapted from the teaching note for the Entropic case study. If instructors have already used the Entropic case to discuss this, then this point can be omitted here, or be used to pertinently but briefly reiterate this (quite important) punchline. This section is also somewhat repetitive with a point made above under Assignment Question 1 regarding *known knowns*, *known unknowns*, and *unknown unknowns*.

to prevent the bad things from happening. As was also noted in the Entropic case, companies have a long history of using checklists to identify bad risks and areas where controls might be missing or deficient, where there is, for example, risk of fraud, loss of inventory, or computer shutdown. In LP&F, there is an added Health & Safety history/experience rooted in extensive regulations.

The ERM processes and heat map outputs as we know them are much less effective for managing the 'good' risks. They do not provide much help in identifying when taking risks is 'prudent'. Some risks showing up as 'red' on a heat map may be exactly what the organization should want because the risk is well worth taking. If that risk area is within the organization's core capabilities, then that is probably where the organization is earning its highest returns. This also would be consistent with Andy's point about *risk appetite* in the early part of the case.

Indeed, the COSO writings talk about managing risks to be within a company's risk appetite. Presumably there should be little or no appetite for bearing bad risks that can be avoided or mitigated at minimal cost. The risk appetite concept was designed to enable better management of the good risks. The concept can be applied fairly easily in some areas, such as in considering whether to hedge foreign exchange risk or in distinguishing financial institutions that would prefer to invest in subprime mortgages or junk bonds rather than high quality corporate debt. But can you tell what LP&F's appetite for risk is? Can LP&F's management explain their risk appetite? The answer is 'no', and Andy seems happy to admit this. Most companies cannot define, much less quantify, their overall risk appetite. Other than possibly placing some boundaries on what risks should be taken, it will not help managers analyze what good risks should be taken.

### **Wrap-up**

As in the Entropic case, toward the end of class, the instructor can ask the students to step back and consider whether the implementation of this ERM process in LP&F was worth the effort. To provide structure to this, they can be asked to do their evaluation in light of the ERM capabilities claimed by COSO:<sup>7</sup>

1. Align risk appetite and strategy
2. Enhance risk response
3. Reduce operational surprises
4. Identify and manage multiple and cross-enterprise risks
5. Seize opportunities
6. Improve deployment of capital

Using the following scale:

- A. Realized some benefit
- B. Would realize some benefit if they improved the process
- C. Never going to happen

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<sup>7</sup> See [http://www.coso.org/documents/coso\\_erm\\_executivesummary.pdf](http://www.coso.org/documents/coso_erm_executivesummary.pdf), p. 1.

This approach usually produces some good final thinking and understanding to conclude the discussion.

## **Pedagogy**

Instructors must make a decision as to how structured to make the case discussion. I tend to be fairly structured in guiding students through the first four discussion questions in the order listed, where the fifth question is really either not necessary (but where the instructor could take the opportunity to quickly highlight the key points that have already surfaced, followed by a quick “anything else?”) or, if some key points have been hard to elicit, the instructor can use this question as a final steer to still try and bring these out.

But the order in which the issues come up is less important than the substantive discussion of the issues. I therefore usually organize my whiteboard in four columns with the headers OBJECTIVES/PURPOSE, CRO/ANDY, PROCESS/SYSTEM, BENEFITS/RESULTS. These correspond with the first four questions. I attempt to go through these left to right, but when a student makes a good point that better suits one of the other rubrics, I either allow that discussion to take place or I park it under the other rubric to come back to when we get to that point (often by calling on the same student to pick it up again and get the discussion going).

While structure is important, allowing sufficient flexibility about the number and order of issues raised will give the students a sense of ownership and lead to stronger engagement in the case discussion.

## Two Budget Targets

### Teaching Note

#### *Purpose of Case*

The purpose of this case is to motivate a discussion of a real situation where a manager created two budgets, one with a relatively aggressive performance target that he communicated to his subordinates and the other with a relatively easy performance target that he communicated to his superiors.

#### *Suggested Assignment Question*

Are Joe's actions ethical or unethical? Explain.

#### *Case Analysis*

I suggest analyzing the case using the four-step framework described in Chapter 15 of the textbook.

##### Determine the facts

These facts should describe who, what, where, when, and how. Among the facts that should be brought out are:

- Joe created two budget targets as described in the purpose of the case section above.
- MCD operated in a rapidly growing, uncertain market. Therefore, it was difficult for Joe's superiors to know how achievable his budget target was.
- Joe's bonuses were based on the target he sent his superiors. Because the targets were highly achievable, he had earned large bonuses.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the Two Budget Targets case.*

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- Joe evaluated his subordinates in comparison with the aggressive targets.

### Define the ethical issues

Stakeholders: Joe  
Joe's superiors  
Joe's peers within ATC  
Joe's subordinates  
ATC stockholders

### *Major ethical principles*

1. Greatest good for the greatest number of people
2. Fairness
3. Duties and obligations (e.g., right to know, good work situation)
4. Virtues (e.g., integrity, honesty)

### *Ethical issues*

An ethical issue can usefully be discussed if someone is hurt or put at risk. Is anyone hurt or put at risk here? The answer is clearly yes. Still, compensating rights or principles may mean causing the hurt or risk is justified. These competing interests should be identified. For example:

1. Joe's well being (e.g., job security, bonus) vs. corporation's right to accurate projections
2. Joe's well being vs. other managers' (who do not pad their budget) bonus claims
3. Joe's well being vs. stockholders' right for maximum returns (challenging targets for maximum motivation, more accurate projections for decision-making purposes)

This list can be extended, but at least these issues should be identified.

Another way to portray the trade-offs is to list the stakeholders in a column. Then add two columns to the right, one titled "Who benefits?" and the other titled "Who is harmed?" For each of the decision alternatives, put check marks in one of the right hand columns to show which stakeholders benefit and which are harmed or put at risk.

It is useful to ask students the question, "Are Joe's actions fraudulent?" The word fraud has been largely defined by the legal community. Since Joe has not broken the law, most students will conclude that he has not acted fraudulently, even though he has clear intent to deceive.

### Decision alternatives and their probable consequences

1. Joe continues using the two budget targets.
  - Joe retains position, keeps his stress low, and earns large bonuses.
  - ATC will pay inflated bonuses.

- Managers who do not or cannot create two budget targets or otherwise create slack will suffer by comparison with Joe.
  - MCD employees will have continued performance pressure and reduced morale.
2. Joe discloses his two-target system to his superiors.
- Supervisors agree?
  - Joe loses right to have the two-target system?
  - Joe gets sanctioned for duplicity?

It is also useful to discuss what happens if one of Joe's subordinates who knows about the two-target system discloses it to Joe's superiors. Does Joe get fired immediately? Or praised for being so creative?

By this point in the discussion, or even earlier, some students will have begun to state their ethical position. For example, they may say that this is standard practice or that this is deceptive. The instructor should ask students to stick to the analysis and defer their conclusions until step 4.

Compare the alternatives with the ethical principles and choose the best alternative

Take a vote. Insist that everyone make a choice. Examine the rationale for different positions.

### ***Pedagogical Suggestions***

Given that this case is so short, it is probably best to conduct the case discussion with the entire class, rather than taking time to break up into small groups. Elicit the four-step method responses shown above. At step 4, have the class vote regarding the appropriate conclusion. Then elicit reasons as to why individual students voted the way they did. Differences in students' conclusions may be due to differences in their interpretations of the case facts, alternative actions, or consequences, or differences in their personal ethical principles. Having students understand the reasons why people can reach different ethical conclusions is an important part of the class.

This is a real example. The real-life Joe did not believe he was doing anything wrong. He thought he was just using a creative method to add a "budget cushion" that, he believed, all smart managers at all organization levels do.



## Conservative Accounting in the General Products Division

### Teaching Note

#### *Purpose of Case*

This case was written to motivate an ethical discussion of earnings management activities. The example presented here is different from most of those discussed because the earnings management activities described in the case *decrease* income. That is, the accounting is conservative. Conservatism makes more students conclude the actions are ethical. However, aren't managers ultraconservative merely because they want to "save" profits they can turn in a later accounting period if needed?

#### *Suggested Assignment Questions*

1. Do you approve of Robert's actions? Are they smart or stupid from the perspective of the division? From the perspective of the corporation?
2. Are Robert's actions ethical?
3. Should Joanne tell anyone of Robert's request?

#### *Case Analysis*

##### **1. What can be done to "accelerate expenses and defer revenues"?**

Expenses that can be accelerated: R&D, advertising, discretionary maintenance, many reserves (e.g., for bad debts, inventory obsolescence).

How to defer revenues: Don't ship the product before the end of the accounting period.

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**2. Is this “earnings management”? How do you define what is or is not earnings management?**

A narrow definition of earnings management is “An intervention in the earnings reporting process.” This definition captures all accounting manipulations (e.g., changing judgments about reserves or accounting policies), but it does not include the actions described in Question 1 (of case analysis) above.

I think a broader definition of earnings management is better. It is: “Actions taken to make performance look better (or worse) than it otherwise would be in the short run. In addition, those involved know the actions have no real economic benefits and might actually be quite costly in the long run.” This definition includes both accounting manipulations (described above) and operating manipulations (changing operating decisions or procedures), such as accelerating expenses and deferring revenues.

In total, the operating manipulations are much more significant in their earnings effects and in the potential harm they can cause a corporation. (Operating manipulations include all the myopic actions described in Chapters 10–11 of the textbook.) The accounting manipulations mostly involve cosmetics, the changing of accruals. The operating manipulations have real cash flow effects.

**3. Are the actions Robert proposes taking smart or stupid?**

They are clearly in the manager’s best interest, but they are not in the best interest of the corporation.

**4. Are the actions Robert proposes taking ethical?**

This question should be addressed by using the four-step framework described in Chapter 15 of the textbook.

**Determine the facts**

These facts should describe who, what, where, when, and how. Among the facts that should be brought out are:

- GPD’s profits are significantly above plan.
- GPD’s performance was above the upper cut-off in Altman’s bonus plan.
- Robert worried that GPD’s plan for next year would be difficult to achieve because the Altman Industries as a whole was not performing well.

**Define the ethical issues**

Stakeholders: Robert  
Joanne (controller)  
Robert’s peers within Altman  
Altman stockholders

### *Major ethical principles*

1. Greatest good for the greatest number of people
2. Fairness
3. Duties and obligations (e.g., right to know, good work situation)
4. Virtues (e.g., integrity, honesty)

### *Ethical issues*

An ethical issue can usefully be discussed if someone is hurt or put at risk. Is anyone hurt or put at risk here? The answer is clearly yes. Still, compensating rights or principles may mean causing the hurt or risk is justified. These competing interests should be identified. For example:

1. GPD personnel's well-being (e.g., job security, bonus) vs. corporation's right to fair financial reporting.
2. GPD personnel's well-being vs. other managers' (who don't have the ability to or don't wish to manage earnings) bonus claims.
3. GPD personnel's well-being vs. Robert's (and Joanne's) obligation to act with honesty, integrity, and objectivity.
4. Robert's well-being vs. stockholders' right for maximum returns.
  - Will conservative accounting adversely affect stock price?
  - Will conservative accounting adversely affect GPD personnel's motivation?
  - Will conservative accounting followed by periods of liberal accounting (where the "acorns are consumed") distort the division's profit trends, making planning and decision-making more difficult?
5. Joanne's desire and obligation to be a good team player within GPD vs. Joanne's fiduciary obligation as controller to have the division do fair and accurate financial reporting.

This list can be extended, but at least these issues should be identified.

Another way to portray the trade-offs is to list the stakeholders in a column. Then add two columns to the right, one titled "Who benefits?" and the other titled "Who is harmed?" For each of the decision alternatives, put check marks in one of the right hand columns to show which stakeholders benefit and which are harmed or put at risk.

It is useful to ask students the question, "Are Robert's actions fraudulent?" The word fraud has been largely defined by the legal community. Since Robert has not broken the law, most students will conclude that he has not acted fraudulently, even though he has clear intent to deceive. Auditors probably would not object because GPD is being conservative and because GPD's results are apparently not material to the corporation as a whole.

## Decision alternatives and their probable consequences

1. Joanne carries out Robert's wishes
  - GPD achieves budget targets in current and future accounting periods. All GPD management personnel retain their jobs, keep their stress low, and earn large bonuses and possibly promotions.
  - Altman will pay inflated bonuses.
  - Altman managers who do not or cannot manage earnings will suffer by comparison with GPD.
  - Altman system of intelligence (trends and projections) is distorted, adversely affecting performance evaluations and decisions.
  - Layoffs in other divisions?
  - No cash flow effects with manipulations of reserves. Accelerating expenses would probably have negative value consequences to the corporation. Deferring shipments to customers could have harmful effects on customer service and would probably delay the payment of the receivable.
2. Robert abandons earnings management plans and reports un-manipulated earnings.
  - The opposite of the consequences described for #1.
3. Joanne tells her controller superior of Robert's plan.
  - Joanne gets fired for not being a team player.

By this point in the discussion, or even earlier, some students will have begun to state their ethical position. For example, they may say that this is standard practice or that this is deceptive. The instructor should ask students to stick to the analysis and defer their conclusions until step 4.

## Compare the alternatives with the ethical principles and choose the best alternative

Students should balance the consequences against their primary principles or values and select the alternative that best fits. Take a vote. Insist that everyone make a choice. Examine the rationale for different positions.

## ***Pedagogical Suggestions***

The case discussion can be done with the entire class or with small groups. If the entire class discusses the case, elicit the four-step method responses shown above. At the last step, have the class vote regarding the appropriate conclusion. Then elicit reasons as to why individual students voted the way they did. Differences in students' conclusions may be due to differences in their interpretations of the case facts, alternative actions, consequences, differences in their knowledge of generally accepted accounting principles (GAAP) or real-life norms, or differences in their personal ethical principles. Having students understand the reasons why people can reach different ethical conclusions is an important part of the class.

If the class is broken into small groups, have each group analyze the case and reach a conclusion (if they can). Then bring all the groups together toward the end of class for a

reporting session. Because the small group method is less directive, it should be used only after the instructor has properly guided the class through a prior illustration of the proper use of the four-step ethical analysis framework.

If it does not come out naturally, the class should be asked to put themselves in Joanne's position. What should she do? What if jawboning to Robert does not work? If she takes the issue to her superiors, it will probably cost her her job. When does earnings management become so serious that she should be willing to bear that cost (or risk)? (This issue is explored in more depth in the Don Russell: Experiences of a Controller/CFO case included in this textbook.)

If the instructor so desires, it is easy to motivate a discussion of what top managers at Altman should do to control GPD's earnings management activities (and others like them). For example, can an effective policy prohibiting earnings management activities be written? Would a code of conduct be effective? Can internal controls be made stricter?

In conjunction with this or other similar cases (e.g., Don Russell: Experiences of a Controller/CFO), I have found it useful to report to students the findings of surveys conducted to try to draw the line between ethical and unethical earnings management actions. These surveys have found a striking lack of agreement between people in all respondent groups (general managers, and finance, control, and audit managers). The respondents also generally condone operating manipulations of earnings but condemn accounting manipulations of earnings. The condoning of operating manipulations, which can have huge effects on reported earnings, raises serious questions about the quality of financial information that is used for decision-making purposes both inside and outside companies. These survey findings are described in some original, but now older, articles:

K. A. Merchant, and J. Rockness, "The Ethics of Managing Earnings: An Empirical Investigation," *Journal of Accounting and Public Policy* (1994), pp. 79–94.

W. J. Bruns, Jr., and K. A. Merchant, "The Dangerous Morality of Managing Earnings," *Management Accounting* (August 1990), pp. 22–25.

The full survey instrument was included in *Harvard Business Review* (March–April 1989), pp. 220–221. On multiple occasions, I have used this instrument in class to stimulate student discussions of the ethics of earnings management activities. Instructors should keep in mind that giving opinions about ethical issues is not the same as rigorous ethical analysis, such as can result through effective use of the four-step framework.

I wrote this case originally for use in a training course in a *Fortune* 500 corporation. The engagement managers asked me to change the name of the division. It turns out the corporation had a division called the General Products Division, which was doing essentially the identical things described in the case. The case hit too close to home.

## Education Food Services at Central Maine State University

### Teaching Note

#### *Purpose of Case*

This case was written to motivate a discussion of the ethics of creating slack in a budget. A strength of the case is that the setting is one with which most students will have some familiarity—a university food service. Another strength is that the case is real; only the names have been disguised.

#### *Suggested Assignment Question*

Are Pam's actions ethical or unethical? Explain.

#### *Case Analysis*

I suggest analyzing the case using the four-step framework described in Chapter 15 of the textbook.

#### Determine the facts

These facts should describe who, what, where, when, and how. Among the facts that should be brought out are:

- Pam Worth's operation is one unit of a university food service division of a large corporation (CFSC).
- Pam's operation is controlled as a profit center.

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- It is important for Pam to achieve her budget. If she does, she will get a good performance review and a 20% bonus. If she does not, she may lose her job.
- Budget slack enables Pam to give her staff more autonomy.
- Budget slack sometimes enables Pam to buy things that allow her to provide better service to the university.
- CFSC earns 100% of the profits up to a limit of 10% of sales. Above that limit, profits are split equally with the university.
- Budgeting is bottom-up, but managers are typically asked late in the process to raise their profit targets by an amount that is difficult to predict.
- Pam has many methods of hiding a cushion in her labor and food costs.
- Pam's bosses have incentives to have Pam create budget slack (and hence achieve her budget).
- It is difficult (is not impossible) for Pam's bosses to detect slack she has put in her budget.

#### Define the ethical issues

Stakeholders:      University  
                         Pam  
                         Other CFSC managers  
                         Owners of CFSC  
                         Food service employees

#### *Major ethical principles*

1. Greatest good for the greatest number of people
2. Fairness
3. Duties and obligations (e.g., right to know, good service, good work situation)
4. Virtues (e.g., integrity, honesty)

#### *Ethical issues*

An ethical issue can usefully be discussed if someone is hurt or put at risk. Is anyone hurt or put at risk here? The answer is clearly yes. Still, compensating rights or principles may mean causing the hurt or risk is justified. These competing interests should be identified. Is the issue one over conflicting rights, questions about the maximization of one's welfare vs. obligations to disclose private information, or obligations to act with integrity and honesty, whatever the consequences. In this case, for example:

1. Pam's well-being (e.g., job security, bonus) vs. university's right to accurate projections.

2. Employees' job satisfaction vs. university's right to accurate projections (for pricing and service plan purposes).
3. Pam's well-being vs. other managers' (who do not pad their budget) bonus claims.
4. Pam's well-being vs. stockholders' right for maximum returns (less sloppy work, less expenditures on unapproved equipment).

This list can be extended, but at least these issues should be identified.

Another way to portray the trade-offs is to list the stakeholders in a column. Then add two columns to the right, one titled "Who benefits?" and the other titled "Who is harmed?" For each of the decision alternatives, put check marks in one of the right hand columns to show which stakeholders benefit and which are harmed or put at risk.

It is useful to ask students the question, "Are Pam's actions fraudulent?" The word fraud has been largely defined by the legal community. Since Pam has not broken the law, most students will conclude that she has not acted fraudulently, even though she has clear intent to deceive.

### Decision alternatives and their probable consequences

Identify the alternatives and their short- and long-term, positive and negative consequences.

1. Pam keeps slack and keeps silent
  - Pam retains position and earns bonus.
  - University may pay inflated costs.
  - University may benefit from better service.
  - Managers who do not create slack suffer by comparison.
  - Employees enjoy greater autonomy.
2. Pam discloses slack to her superiors
  - Supervisors tell her to keep slack.
  - Pam loses right to have slack?
  - Pam gets sanctioned for duplicity?
3. Pam discloses slack to university
  - Pam at risk of losing job and bonus.
  - CFSC may lose university's business.
  - University may reduce costs, tighten procedures.
  - Food service employee morale may deteriorate.

By this point in the discussion, or even earlier, some students will have begun to state their ethical position. For example, they may say that this is standard practice or that this is



deceptive. The instructor should ask students to stick to the analysis and defer their conclusions until the next step.

Compare the alternatives with the ethical principles and choose the best alternative

Students should balance the consequences against their primary principles or values and select the alternative that best fits. Take a vote. Insist that everyone make a choice. Examine the rationale for different positions.

### ***Pedagogical Suggestions***

The case discussion can be done with the entire class or with small groups. If the entire class discusses the case, elicit the four-step method responses shown above. At the last step, have the class vote regarding the appropriate conclusion. Then elicit reasons as to why individual students voted the way they did. Differences in students' conclusions may be due to differences in their interpretations of the case facts, alternative actions, or consequences, or differences in their personal ethical principles. Having students understand the reasons why people can reach different ethical conclusions is an important part of the class.

If the class is broken into small groups, have each group analyze the case and reach a conclusion (if they can). Then bring all the groups together toward the end of class for a reporting session. Because the small group method is less directive, it should be used only after the instructor has properly guided the class through a prior illustration of the proper use of the four-step ethical analysis framework.

This is a real case. I can tell you that even after I questioned the real-life Pam as to whether her creation of slack was ethical, she did not have even a tinge of guilt.

### ***Another Issue***

Some instructors find it useful to discuss another ethical issue described in the case. That is, should the researcher disclose what he knows about Pam's actions to the university even though he conducted the interview with Pam under strict guarantees of confidentiality? I do not discuss this issue because I want to focus on the financial control system ethical issue—budget slack—and not get the class distracted.

## The “Sales Acceleration Program”

### Teaching Note

#### *Purpose of Case*

This short case describes a specific illustration of a form of earnings management that many managers use to achieve their annual (or quarterly) budget targets. They push the production line a little harder at the end of the accounting period to generate more shipments and billings. Since this method does not involve alterations of the accounting records, it is properly classified as an “operating” form of earnings management. However, it does have an effect on accounting accruals; as sales increase, accounts receivable also usually increase in the short-run. The case can be used to discuss both the ethics and the economics of this common form of earnings management.

#### *Suggested Assignment Questions*

For an ethics discussion, we suggest using the following question:

Did the SPD managers act in an ethical manner in deciding to implement the “Sales Acceleration Program”?

Instructors can add other questions if they want to motivate other discussions. It can be useful to discuss the economics of this gaming behavior. That is, is it in the best interest of SPD and CFC? Moreover, it can be useful to discuss how the existing control system might have induced this type of behavior and how it might be changed to minimize or eliminate such behaviors.

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of The “Sales Acceleration Program” case. It provides analysis and questions that are intended to present alternative approaches to deepening students’ comprehension of business issues and energizing classroom discussion.*

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## Case Analysis

The ethics analysis of the situation can be organized as follows:

Determine the facts:

Who, what, where, when, and how:

- SPD is in the fourth quarter of the year, and it needs strong performance in the quarter to achieve its annual profit target.
- Achieving the profit targets is important because it affects payouts in what is called a “lucrative” bonus program.
- The management team met to brainstorm what might be done. The “Sales Acceleration Program” idea surfaced at this meeting. No other alternatives were identified.
- The production employees probably will not enjoy working overtime at the end of the year even though they are paid time-and-a-half.
- The resulting increased sales and profits in the current year are probably mostly just being borrowed from the next year.
- The company’s borrowing costs would increase because of the high levels of accounts receivable. But CFC’s interest expenses are not allocated to divisions.
- The “Sales Acceleration Program” is not fraudulent, and it probably does not violate any explicit policy in place at CFC.

Define the ethical issues:

Stakeholders:     SPD  
                          The SPD management team  
                          SPD production employees  
                          CFC and its shareholders

Ethical issues:

If the “Sales Acceleration Program” is implemented, the following stakeholders will **benefit** *in the short run*:

- The SPD management team will earn higher bonuses and their job security will be increased.
- The SPD production employees’ earnings will increase because of the additional hours and overtime premium.
- CFC’s shareholders might benefit if the stock market does not perceive how earnings were boosted. However, this action will probably not have a material effect on CFC’s financial statements. Moreover, if it did, sophisticated analysts could probably see the rise in accounts receivable and figure out that the earnings effect is probably merely transitory.

The following stakeholders are **harmed**:

- CFC will have to bear increased borrowing costs.
- The SPD production employees' welfare is harmed because they do not want to work overtime during the holiday season. The case suggests that this negative effect exceeds the benefit the employees receive in terms of higher compensation.

Overall this analysis suggests that this action is not in the best interest of the corporation. It is bad economics.

Decision alternatives and their probable consequences:

1. Implement the "Sales Acceleration Program," achieve the annual profit targets, and earn higher bonuses.
2. Don't implement the Program and fail to achieve the targets.

Compare the alternatives with the ethical principles and choose the best alternative:

Is the Sales Acceleration Program ethical? Major ethical principles:

1. Greatest good for the greatest number of people
2. Fairness
3. Rights and duties
4. Virtues

The major benefit is to the SPD management team, but they have not done anything to warrant their earning the higher bonuses. Therefore, using a utilitarianism (consequentialism) line of reasoning, the "Sales Acceleration Program" probably can be said to be unethical.

One might conclude that the Program is not fair to the production employees who are made to work overtime during a holiday season. However, if this happens every year, perhaps the employees should anticipate it, and if they are not comfortable with the situation, they can find alternate employment.

The production employees probably have no right to expect normal hours during any particular work period, so there is no duty for the corporation to provide them. However, does CFC's top management and shareholders have the right to expect the SPD division management team to make decisions that benefit the corporation, not just themselves? If so, then the "Sales Acceleration Program" might be said to be unethical.

Similarly, it might be concluded that the actions of the SPD management team are less than honest. However, on the other hand, their actions are consistent with the company's incentive plan, and they probably do not violate any laws or specific policies or procedures.

The ethical conclusion here depends on how one frames the question!

### **Pedagogy**

Like most of the other ethics cases, this case can be discussed with the entire class or with small groups. If the class is broken into small groups, have each group analyze the case and reach a conclusion (if they can). Then bring all the groups together toward the end of class for a reporting session. Because the small group method provides less direction, it should be used only after the instructor has properly guided the class through a prior illustration of the proper use of the ethical analysis framework.

## The Expiring Software License

### Teaching Note

#### *Purpose of Case*

This case was written to motivate a control-related ethical discussion of a relatively common type of circumstance, where a manager knowingly violates company policy for a noble purpose. In this situation, the manager evades a limit placed on his purchasing card. If he did not violate the policy, an important software package whose license had expired would be shut down, causing a significant disruption. Such situations, which occur in many different forms, are caused by poor, often obsolete, behavioral restrictions.

#### *Suggested Assignment Questions*

Did Jimmy Wu act in an ethical manner in using his purchasing card to renew the Citrix software license?

#### *Case Analysis*

Determine the facts:

Who, what, where, when, and how:

- Jimmy Wu is an information systems manager.
- His company's license to use Citrix software is about to expire because of Jimmy's failure to pay the invoice in time. If it expired, IS users would experience considerable inconvenience. The cost to renew is \$3,600.

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*This note was prepared by Professors Kenneth A. Merchant (University of Southern California) and Wim A. Van der Stede (London School of Economics) for the sole purpose of aiding classroom instructors in the use of The Expiring Software License case. It provides analysis and questions that are intended to present alternative approaches to deepening students' comprehension of business issues and energizing classroom discussion. Assistance from Leslie R. Porter (University of Southern California) is gratefully acknowledged.*

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- Jimmy has a purchasing card with a limit of \$2,000 per purchase, and a monthly limit of \$5,000.
- He asked the vendor to split the invoice in two. He used the purchasing card to pay two \$1,800 invoices. Problem solved.

Define the ethical issues:

Stakeholders: Jimmy Wu  
Southwest Industries (SWI) and its shareholders  
SWI IS users

Ethical issues:

If Jimmy solves this problem by splitting the invoice, everyone seems to benefit *in the short run*. However, there are some subtle costs. This situation might erode Jimmy's personal moral code and perhaps that of others if they learn about what happened. Jimmy violated company policy in this circumstance and got away with it. Might he violate another policy in the future? Where will he draw the line? Jimmy is also covering a mistake he made. Does his supervisor not have the right to know that this mistake was made?

Decision alternatives and their probable consequences:

1. Ask the vendor to split the invoice and use the purchasing card to solve the problem, as Jimmy did in the case.
2. Go through proper channels, the purchasing department, to get the \$3,600 invoice paid. Possibly the software will be shut down, inconveniencing many users.
3. Ask Citrix to extend service while the payment was being processed.
4. Call his manager and ask for permission to split the invoice.
5. Pay the invoice with his own personal credit card and then ask for reimbursement.

Compare the alternatives with the ethical principles and choose the best alternative:

Did Jimmy act ethically? Major ethical principles:

1. Greatest good for the greatest number of people
2. Fairness
3. Rights and duties
4. Virtues

The best ethics discussion is provided in discussing the trade-offs between decision alternatives #1 and #2. Thus, instructors should try to shut off the other options.

If students suggest option three, add the following assumption: SWI was a notoriously slow payer. The last time SWI asked Citrix for a similar extension, it actually took the SWI purchasing department several weeks to pay the invoice. Citrix personnel were quite annoyed at this delay.

If students suggest options four or five, add the following assumption: This was the second time in a month that Jimmy had failed to complete an important task. He had just been reprimanded by his boss for the other failure.

Given the two main alternatives, in utilitarian terms what Jimmy did was probably ethically acceptable. He solved a problem with minimum costs, in the short run anyway.

However, other ethical reasoning models might lead to different conclusions. Did Jimmy's supervisor have a right to know that he originally made a mistake? If so, Jimmy has the obligation to allow this fact to come to light. Did Jimmy act in a less than virtuous manner? He knowingly violated company policy. Can the company tolerate this type of behavior? Can the behavior be tolerated if the policy is clearly inappropriate? Can employees be allowed to make judgments as to whether particular policies are inappropriate? In this particular case, there are good reasons for having low limits on purchasing cards because such cards can easily be misused.

### ***Pedagogy***

Assuming instructors can keep the focus on the two main decision alternatives; the only special challenge that might be faced is in helping some students understand what a purchasing card is and why companies use them.

Toward the end of the class, the instructor can tell the class that in the actual case situation, Jimmy asked Citrix to split the invoice without thinking about any ethical considerations. This suggests that the company's control system was deficient.





**University of Southern California**

**Marshall School of Business**

Leventhal School of Accounting

*Rev. 9/19/16*

## **Wired, PLC**

### **Teaching Note**

#### ***Purpose of Case***

This ethics vignette describes a situation faced by Don, the CFO of Wired PLC, a Thai subsidiary of a German telecommunications company. His firm was acquiring a company that bought cell phone minutes in bulk from Wired and sold them at retail. Don knew that because they were acquiring a functioning operating business this acquisition had to be accounted for as a business combination. However, the subsidiary CEO wanted the transaction to be accounted for as a capital expenditure to make the growth appear as “organic” rather than as the result of an acquisition. This CEO enlisted the support of the parent company’s CFO who rationalized the accounting treatments as “gray.” Don had to decide what to do. How can he convince his bosses that the accounting treatment he proposes is correct? Or should he just leave the company and a job that he loves?

This is a real case. Only the names have been changed.

#### ***Suggested Assignment Questions or Questions to Bring Up for Discussion in Class***

1. Assume that Don’s interpretation of IFRS Statement #3 as it applies to the accounting transaction described in this case is correct:
  - a. What are Don’s options?
  - b. What should he do?
2. For a number of organizational and personal reasons, convincing his bosses that his accounting treatment is the right thing to do is probably Don’s best option. How should he go about winning that argument? What should he say, to whom, when, and how? Think about the main

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arguments (reasons and rationalizations) that he is trying to counter, what's at stake for the key parties, and the levers he can use to win the argument?

### **Discussion and Pedagogy**

As with all of these ethics-related cases, I find it useful to start class by clarifying facts.

Clarify facts:

- Don is the CFO of a Thai subsidiary of a German telecommunications company—70% owned by the parent; 30% publicly traded on the Bangkok stock market.
- A small subsidiary (4% of parent's revenue), but good growth potential.
- Don is a U.S. citizen. He loves his job at Wired.
- Don also has responsibility for investor relations.
- The issue:
  - A transaction—the acquisition of a customer. Would increase Wired's revenues by 6%.
  - Wired's CEO wanted to account for the acquisition as a capital expenditure.
  - Don argues that it should be accounted for as a business combination because it's an entire business and part of the transaction would be an "earn out."
  - CEO escalates the issue to the parent's CFO. He argues that it is better for the business to account for it as a capital expenditure because it would be seen as providing "organic" growth. Orders Don to "get it done. Be creative."
- Don's initial solution—report that the capital expenditure budget was already spent. This was seen as a minor hurdle that should not provide a constraint.
- CFO takes the issue to Wired's independent auditors. They thought the issue was "gray."
- CFO declares the issue over—"Get it done!"
- Don thought the accounting treatment was just plain wrong. Did not want to sign the financial statements.

What are Don's options?

1. Give up on the issue:
  - a. Obedience-to-authority rationalization.
  - b. Materiality rationalization? (This acquisition seems to be material.)
  - c. Locus-of-loyalty rationalization. (Do what is best for Wired. The issue is gray.)
2. Appeal to another third party?
3. Call a firm hotline?

#### 4. Resign.

What is at stake?

Don

- Relationship with both his boss and the parent CFO.
- Professional reputation and future employment.
- Possible legal problems?
- Self-respect and his perception of himself as someone who can and does act on his values.

CEO and CFO

- Professional reputation.
- Legal problems?
- Higher Wired valuation if argument is won.

Wired and its shareholders

- Higher valuation if seen as organic growth.
- But potential risks—potential loss of reputation. Lawsuits.

Enablers/Disablers

*Enablers* (of moral courage—something that gives a person power, means, competence or ability):

- Don is apparently a strong accountant.
- The due diligence accounting firm opinion that the transaction could not be credibly accounted for as an ordinary capital expenditure.
- The capital expenditure budget had already been spent.

*Disablers* (something that weakens or takes away power, means, competence or ability):

- Don likes his job.
- Don likes living in Thailand. If he loses this job, he will have to leave Thailand because his visa is tied to his job.
- Don had only been in Thailand for 18 months. This is a foreign country, so he is probably seen as an outsider. He had not had much time to build up goodwill with key people.
- The order is coming from Don's bosses. He has no organizational power.

- Wired will not make its budget if the accounting is not done as an asset purchase.
- Everyone's bonuses were tied to top-line revenues. Acquisition revenues were not included. Thus, everyone up and down the line wanted the asset purchase treatment.
- The audit firm that opposed the asset purchase treatment never put its conclusions in writing.

What levers can Don use to influence CFO (and CEO)?

- Help them understand what is at stake. Everybody might have lost sight of the potential negative effects.
- See how other companies have accounted for similar transactions.
- Attract someone else in the company as an ally. But there is not much time, and Don has not built strong relationships.
- Bring in outsiders, such as the audit committee or the auditors. Or maybe even regulators? If Don does this, he will probably have to leave the company anyway, and he will not get a good recommendation.

## Epilogue

Don refused to report the transaction as a capital expenditure, which led to continued stress and conflict at work. When the deal was about 95% closed, Dan and the head of external reporting were offered a six-month severance package to leave the company. Both accepted the offer. Wired brought in a German to serve as CFO.

The entire process played out over a 2.5 month period. In the end, the transaction was reported as an asset purchase. At various points, Don seriously considered reporting the issue to the audit committee, but decided that it was not worth further jeopardizing his career. Under Thai law, giving away company secrets can cause someone to go to jail. Whistle-blowing could be conceived of as giving away secrets.

The auditors signed off on the accounting treatment. Wired was a very large client for this audit firm.

Don had to leave Thailand when he lost his job. The chief accounting officer who left, a Thai citizen and a former audit partner, was unemployed for over a year after leaving.

Don's thoughts in retrospect: (1) I should have lined up my allies sooner; (2) If people think they can get away with things, they will do it.

## **My Conclusion**

Don showed strong moral courage by refusing to go along with the bad accounting treatment. Maybe he did not do enough or was not skilled enough to “win the argument.” Is Don a failure for not having been successful in giving the proper voice to his values? Would additional skill have enabled him to win this argument? But maybe this is an argument that could not be won?

Then Don seemingly lost his courage after he had decided to leave the company. He did not get the problem fixed. Should he have been a whistle-blower? Should his conscience trouble him there? Could he be seen as a coward?

The outcome of this situation is not a good one. The company engaged in bad accounting. Don was in the best position to try to get the problem fixed, and he did not do so.



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Rev. 9/19/16

## Mean Screens USA, Inc.

### Teaching Note

#### ***Purpose of Case***

This ethics vignette describes the uncomfortable position faced by Donna, a CFO whose boss, Thomas, the company CEO, was demanding aggressive accounting methods. The company had recently gone public in an IPO with overly optimistic financial forecasts, and the CEO wanted to close the gap between reported earnings and those forecasts. Donna was convinced that the aggressive reporting was not warranted, but Thomas kept pushing. Donna had to decide what to do. Her best option was to try to “win the argument”.

This is a real case. Only the names have been changed.

#### ***Suggested Assignment Questions or Questions to Bring Up for Discussion in Class***

1. Assume that Donna is right to resist Thomas’ demands for aggressive accounting. What are her options, and what are the consequences of each of those options?
2. Probably the best alternative for Donna is to convince Thomas that it would be wrong to implement the financial reporting alternatives that he has been proposing. How should she go about winning that argument? What should she say, to whom, when, and how? Think about Thomas’ main arguments (reasons and rationalizations) that she is trying to counter, what’s at stake for the key parties, and the levers she can use to influence Thomas.

#### ***Discussion and Pedagogy***

Clarifying facts is a useful way to begin the class. A misunderstanding about even one key fact can dramatically affect the discussion.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using the Mean Screens USA, Inc. case (A213-02).*

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### Clarify facts:

- Donna is the CFO of the U.S. sales and distribution division of a privately-owned Chinese company.
- The company wants to spin off a portion of the U.S. subsidiary in an IPO.
- Donna perceives that the division president's earnings projections are "extremely aggressive."
- She expressed her concerns, and Thomas (the president) lowered the projections slightly.
- While Donna thought that the numbers were still aggressive, she decided to accept them.
- The IPO was successful and sold 49% of the company.
- After the first year, the company missed its profit projections by over 30%. Thomas looks for ways to boost earnings. His first thought is to reduce receivables reserves. His second idea is to postpone inventory write-offs. Donna resists.
- Thomas then suggests playing with transfer prices.
- Donna wonders what she should do.

### What are Donna's options?

1. Do what the boss (Thomas) wants.
2. Suggest some other way to allow him to report the results he wants (e.g., change accounting methods),
3. Convince Thomas that what he is proposing is wrong.
4. Resign.

Option #1 is unacceptable.

Option #2 is probably not feasible. Should it be used if it was feasible?

Option #3 is probably the obvious answer. But how to do it successfully?

Option #4 is a "safe" way out, although Donna would bear some personal costs, and the problem would not be solved.

### What is at stake?

#### Donna

- Professional reputation and future employment.
- Legal and professional sanctions.

- Salary, bonus, job. She could be out of work for a lengthy period of time.
- Self-respect and her perception of herself as someone who can and does act on her values.

Thomas

- Professional reputation
- Legal sanctions
- Investor relations
- Stock valuation (and presumably personal wealth)

The company, its employees and its shareholders

- Stock valuations
- Company reputation

Enablers/Disablers

The enabler/disabler terminology is adopted from a book by Mary Gentile called *Giving Voice to Values*.<sup>1</sup> Enablers and disablers are things that affect a person's power, means, competence and/or ability to speak up in situations like this. Enablers provide these things. Disablers take them away. To enhance their abilities to speak up in situations like this and win the argument, every individual should try to enhance their enablers and reduce their disablers. If everyone had the inclination to speak up when they see wrong things taking place and the skills to win the argument, the organization's control system would be considerably stronger.

In this case, here are Donna's enablers and disablers:

Enablers:

- Donna knows what types of accounting should not be done.
- Thomas knows that Donna is the accounting expert.
- Donna is a CPA, so she has standards to live by. Her reputation and license to practice are at risk.
- There is no ambiguity in what is the right thing to do. Donna even considers some of the actions fraudulent, so the penalties could be high.
- Mean Screens is a public company, so scrutiny is higher than of a private company.

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<sup>1</sup> M. C. Gentile (2010). *Giving Voice to Values: How to Speak Your Mind When You Know What's Right*. Yale University Press.



Disablers:

- Donna is worried about her bonus and her job. She has a family to support.
- Thomas is apparently ignorant about accounting rules and requirements. That makes it harder to have a meaningful discussion with him.

What levers can Donna use to influence Thomas?

- Help him understand what is at stake. He might not comprehend the possible negative consequences of poor accounting.
- Use allies to help deliver the message:
  - The audit committee. As a public company, Mean Screens will now have an audit committee composed of knowledgeable and independent parties.
  - The auditors. They can make it clear that they will express an adverse opinion if the company is using aggressive or unacceptable accounting.

Donna must be careful not to make assumptions about Thomas' motivations. Doing so might make him very resistant to her arguments. She should appeal to his positive motivations, which seem to be to get the stock price up.

## **Epilogue**

In this case, Donna did not try very hard to win the argument. Thomas was always pushing the gray reporting line, and Donna decided that she did not want to continue working for that sort of man. She concluded that Thomas was incorrigible and began seeking alternative employment. She left the company shortly after the time of the case. While she was employed, the company's earnings were always recorded in accordance with GAAP.

Thomas eventually understood how inappropriate his requests had been, and he apologized to Donna for having put her in such a difficult position. The original, majority investors were not happy with the earnings shortfalls, but they had too much vested in the company to walk away. They had little choice but to accept reality. The company never faced any lawsuits from minority shareholders. Although it took more time than the investors had hoped, the company did eventually become very successful and is still in business today. It has again gone private. Now with less stringent scrutiny, Donna suspects that it has allowed Thomas to push the accounting more into the gray area again.

## **My editorializing**

I think Donna resigned too soon. Not all arguments are winnable, but this one probably was. Thomas was mostly ignorant. He eventually learned something about accounting, and the company survived. Donna seems to have understood the importance of fixing the accounting problem, but did not want to invest the effort or did not have the skills to win the argument.

In the end, she took the easy way out. She was well aware that this was an unpleasant and risky working environment, with her continually being pushed to make unethical decisions, so she just removed herself from the company; she quit. However, the problem was still there. Donna was in the best position of anybody to get the problem fixed. This could easily have turned into a fraudulent financial reporting example. This company escaped that fate mostly by luck. Companies and their investors would be better served if their CFOs (and others with knowledge of wrongdoing) had more backbone. People speaking up when they see wrongdoing could be, and should be, an important part of every organization's control system.

One take-away reminder in this case is that it is easier to behave ethically when one is in the right working environment.

## Lernout & Hauspie Speech Products

### Teaching Note

#### *Purpose of Case*

The Lernout & Hauspie Speech Products (L&H) case tells a true story (with no disguise of names or figures), written from public sources, about how a high-technology “darling” of Belgium engaged in fraudulent financial reporting and business practices and, because of these, finally went bankrupt.

The case was written to raise issues related to fraudulent financial reporting at top executive levels in a corporation. The case is useful for discussing the pressures self-imposed by ambitious entrepreneurs, and by the environment in which they operate, which may lead them to distort performance measures and commit fraud; the various methods by which the distortions are often accomplished; and the methods by which the distortions can be avoided or detected on a timely basis.

In fact, L&H’s last chief executive, Philippe Bodson, who replaced Duerden in January 2001 to try and save the firm, said that upon learning of PricewaterhouseCoopers’ findings he “was very impressed by the level of sophistication” of the fraud and “the amount of imagination that went into it.”<sup>1</sup> Mr. Bodson said the fraud at L&H Korea should become a case study in business schools.

While most of the other cases that bear on the issue of fraudulent financial reporting are based in the United States, this case is on a European company that was once listed on the Nasdaq Stock Exchange. It raises issues related to financial reporting in a global economy during a time of many technological innovations (some of which promising, such as L&H’s speech recognition technologies, and some of which just a bubble like the many *e*-related

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<sup>1</sup> John Carreyrou, “Lernout Unit Books Fictitious Sales, Says Probe,” *The Wall Street Journal* (April 9, 2001), p. B2.

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*Professors Kenneth A. Merchant, Wim A. Van der Stede, and research assistant Xiaoling (Clara) Chen wrote this teaching note as an aid for instructors using the Lernout & Hauspie Speech Products case. The 2003 teaching note was revised in 2011 with the help of Professor Martine Cools.*

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ventures of the late 1990s) and booming stock markets. During their analysis of the case, students should be encouraged to think about this general environment as well as about differences in financial reporting between Europe and the United States, at least in a general sense. In this case, for instance, Belgium's national pride and L&H's appeal to an American-like capital markets culture played an important role in creating the L&H bubble.

This case is also compelling in that the fraudulent financial reporting was not revealed or triggered by auditors or financial analysts, but by reporters of *The Wall Street Journal*. This leads to the question of what could have been done to avoid scandals like this in the future and who should be accountable to shareholders for such accounting frauds.

### **Case Summary**

Founded in 1987 by two Belgian entrepreneurs, Jo Lernout and Pol Hauspie, L&H reported spectacular growth in the late 1990s. It then used its soaring stock to buy rival companies and became a world leader in speech technology and software. By early 2000, the company had a market value approaching \$10 billion, with major investors that included stalwarts like Microsoft and Intel. L&H had joint headquarters in Ieper (Belgium) and Burlington (Massachusetts), and its shares were primarily traded on NASDAQ.

In August 2000, articles in *The Wall Street Journal* that questioned L&H's rapidly growing revenues in South Korea prompted an SEC investigation of L&H's accounting practices in the United States and Belgium. The investigation uncovered massive accounting frauds including fictitious sales and fraudulent third-party transactions. L&H admitted to fraud and filed for bankruptcy. Later audits found that \$373 million, or 45% of the revenue L&H reported from early 1998 to mid-2000, was fictitious.

In September 2010, a Belgian court found the company's co-founders, Mr. Hauspie and Mr. Lernout, as well as former CEO Bastiaens and another senior manager guilty on various charges relating to financial fraud, including falsification of annual accounts, forgery, and market manipulation. Mr. Hauspie, Mr. Lernout, and the senior manager were all sentenced to five years in prison, of which three years effective and two years probationary. Mr. Bastiaens was sentenced to two years effective imprisonment. Under Belgian prison terms, however, they were unlikely to have to clock any jail time.<sup>2</sup> Nonetheless, observers seemed unanimous in deeming these sentences to be quite "heavy penalties" for white collar crimes. (Instructors can poll students on their sense of the severity of the penalties.)

While KPMG was cleared, its partner responsible for the accounting supervision at L&H was fined €2,478.93. The court declared that the professional fault held against him was not intentional, but he was found guilty of negligence.<sup>3</sup>

These charges, however, covered the criminal liability of those involved in the company's fraud only. The question of compensation was to be tackled in pending civil proceedings, which were slated to start by the end of 2011.<sup>4</sup> After more than a decade, the case clearly is still not closed.

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<sup>2</sup> Charles Forelle, "Lernout Founders Guilty of Fraud," *The Wall Street Journal* (September 2, 2010), p. B.1.; Mark Eeckhaut, "L&H-Toplui Wellicht Nooit Naar de Cel," *De Standaard* (September 22, 2010); Deminor ([www.deminor.com](http://www.deminor.com); September 23, 2010).

<sup>3</sup> *Ibid.* (Deminor).

<sup>4</sup> *Ibid.* (Deminor).

### **Suggested Assignment Questions**

1. Is there anything unique about L&H that made the company prone to engage in fraudulent accounting practices?
2. Which were the questionable business (accounting) practices that L&H engaged in? Classify each practice as acceptable, unethical, or fraudulent. Are such practices smart? Are they legal?
3. Do you believe KPMG's claim that its auditors have been fooled by L&H? If yes, how could the auditors have been fooled so easily? If you don't believe they were fooled, why did they go along with the aggressive financial reporting?
4. What could have been done to prevent the fraudulent behaviors from taking place at L&H (or to prevent similar scandals from taking place at other companies in the future)?
5. Do recent corporate governance reforms provide any better safeguards to try and prevent major corporate calamities?

### **Case Analysis**

The instructor can start the class discussion with the first assignment question: *Is there anything unique about this company that made it prone to engage in fraudulent accounting practices?*

Students will list various factors that increased the likelihood of manipulative behaviors at L&H because they either provided motivation for manipulative behaviors or created opportunities for such behaviors. These may include:

- (1) Desperate need for steady performance to keep stock price up;
- (2) Belgium's national pride and broad public interest in the company's success;<sup>5</sup>
- (3) Ambitious entrepreneurs that have a lot, including reputation and personal assets, at stake;
- (4) Aggressive growth targets;
- (5) No differentiation of products or services, hence, little diversification of risk or little opportunity to obtain relatively steady or predictable revenues or profits from a portfolio of products or services in several stages of development and commercialization;
- (6) Aggressive expansion into foreign countries (new markets in general) without solid market analysis and intimate knowledge of local management.

After the students have identified these (and other) factors, the instructor can ask if these characteristics are unique to L&H. None of these factors is individually unusual, but the combination of having all in one corporation is worrisome. Indeed, Stefaan Top, a Belgian

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<sup>5</sup> L&H was, in fact, the company that introduced, and engaged, the broad Belgian public in an American-like stock market culture. Many Belgians owned (and traded) L&H stock, and the company's stock price and latest ventures were the subject of casual talk among many on a daily basis.

venture capitalist, comments that the combination of ambitious entrepreneurs and a government that sorely wanted “a local tech champion was a combustible mix—it was dangerous.”<sup>6</sup>

If time permits, the instructor can also ask the students to think about the similarities and dissimilarities between the L&H case and recent corporate calamities due to accounting scandals in the United States, such as Enron and WorldCom. Students will probably notice that points (2), (3), and (5) are not necessarily (as) relevant for companies like Enron and WorldCom, but points (1), (4), and (6) are likely to be (equally) relevant. The instructor should get across the point that although most companies do not have accounting frauds as extreme as those in L&H, unethical financial reporting is highly salient problem that has (recently) attracted the attention of many people.

After identifying the factors that contribute to fraudulent business (accounting) practices, the instructor can turn to assignment question 2: ***Which were the methods of accounting manipulations that L&H used?*** The instructor can ask the students to classify each method as one of the following:

- Acceptable business practice;
- Unethical but legal business practice;
- Fraudulent business practice.

Students may disagree about the classifications. The instructor can encourage the students to provide reasons for their classifications. After some debate, the instructor should draw conclusions about the classifications and clarify the meanings of each term, especially the differences between *unethical* and *illegal*.

The major methods to be discussed include the following:

(1) Factoring of unpaid receivables to banks to obtain cash up front. Side letters from L&H gave the banks the right to take the money back if they couldn't collect from L&H's customers. Hence, the factoring agreements were actually loans.

(Unethical but legal business practices.) Each transaction is by itself not illegal; however, the way the combination of transactions was disclosed (as “factoring”), and the lack of disclosures about the side letters, was misleading, and thus, fraudulent and unethical.

(2) Established LDCs (Language Development Companies) and reached license agreements with them under which the LDC would do software development on its own as a franchise partner. The LDCs bore L&H's R&D expenses and funneled license revenues into L&H.

(Fraudulent business practices.) The main purpose was to get R&D expenses off L&H's books, yet to book the revenues resulting from the LDC-agreements. Without necessarily going into the complex details of such deals, the purpose of these LDCs was similar to Enron's notorious Special Purpose Entities (SPEs).

(3) L&H Korea reported fictitious customers and sales.

(Outright fraudulent.)

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<sup>6</sup> *Ibid.* 1.

(4) The bulk of L&H Korea's sales came from contracts signed at the end of quarters, so managers could meet ambitious quarterly sales targets and receive large bonuses. For instance, 90% of the revenue recorded by L&H Korea in the second quarter of 2000 was booked in 30 deals signed in the final nine days of the quarter.

(Unethical but legal if the sales contracts are "real".) This example also highlights how the design of the management control system, such as the reliance on quite lucrative formula-based bonuses without additional checks and balances, can "perversely stimulate" managers to engage in unethical behavior.)

This classification exercise will help the students understand the fine line between unethical and illegal accounting and business practices. The students should also understand that the ethical test is, in our view, tighter than the legal test. Some actions should be considered unethical even though they are not illegal.

The instructor can then guide the students to address the other assignment questions.

***Do you believe KPMG's claim that its auditors have been fooled by L&H? If yes, how could the auditors have been fooled so easily? If you don't believe they were fooled, why did they go along with the aggressive financial reporting?***

KPMG accused the former top management of L&H of signing off on revenue inflation tactics, of lying about key business structures within the company, of influencing others to give false information to KPMG auditors, and of orchestrating a campaign to minimize their involvement in the events that have led to the calamitous downfall of the company.

However, sudden changes in revenue figures should have raised a red flag (at least, so it seems in hindsight). For example, L&H saw huge revenue growth in Singapore in 1998. In 1999, L&H's Singapore operation dried up and the Korea operation boomed. It is (pretty) obvious from Exhibit 1 in the case that there is something unusual about the Korean operation. Sales in Korea jumped from \$97,000 to almost \$59 million within one year. Auditors seem to have missed these red flags. Instead of relying on the documents provided by L&H, the auditors should have performed checks similar (or, one would expect, better and more rigorous checks!) to what *The Wall Street Journal* reporters did, such as calling up alleged customers and confirming the transactions.

On the other hand, the auditors may have been fooled because they did not understand the relatively new and complex speech products business. They also may have exhibited confirmation bias by signing off on a prominent, growing client that they clearly wanted to retain. Or was auditor independence compromised in some other way (e.g., because of other management services with their client)?

But, if auditors are so easily fooled, then what role do they play, or which assurances do they offer, for the functioning of the capital markets?

As mentioned above, KPMG was cleared of any wrongdoing, but its partner responsible for the accounting supervision at L&H was fined €2,478.93. The court declared that the professional fault held against him was not intentional, but he was found guilty of negligence.<sup>7</sup>

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<sup>7</sup> *Ibid.* (Deminor).

Although corporate liability cases are often very complicated, law experts reckon, however, that KPMG could still be held liable in the civil case, and if so, face compensation charges.<sup>8</sup>

***What could have been done to prevent the fraudulent behaviors from taking place at L&H (or to prevent similar scandals from taking place at other companies in the future)?***

- (1) If investors and auditors had paid more attention to analysts' warnings ... (Actually, financial analysts had been suspicious of L&H's financial results as far back as 1997. In February 1997, Lehman Brothers' Brian Skiba issued a report, claiming that L&H's growth in the United States and Europe was much lower than investors had assumed, and that the company was not coming clean. Bastiaens denied it, but in a conference call, he refused to give a geographic breakdown of sales.<sup>9</sup> However, investors kept ignoring such warnings by the analysts.)
- (2) If auditors had known more about the business and paid more attention to red flags ...
- (3) If Belgium (as well as other capital markets, such as those in the United States) had more strict regulations for financial reporting and corporate governance ...
- (4) If the company had had an ethical corporate culture and hired ethical managers ...
- (5) If the company had had an effective board of directors and audit committee ...
- (6) If investors had been more critical of management's claims of success ...

... then, perhaps, some of these fraudulent behaviors could have been prevented?

***Do recent corporate governance reforms provide any better safeguards to try and prevent major corporate calamities?***

Corporate governance reforms have been enacted the world over, yet the debate continues as to their effectiveness. This is obviously a complex and multifaceted discussion, but instructors wishing to engage in it can find some inspiration in Bazerman et al. (1997) and Moore et al. (2006) with respect to reforms focused on auditors and auditor independence.<sup>10</sup> Other facets of corporate governance reform are briefly mentioned in an article from *The Economist* and some references therein.<sup>11</sup>

An expanded, yet pertinent, discussion along any of these lines makes this case quite amenable for use in the context of a broad variety of corporate governance themes, including auditor (and director) independence (such as illustrated above with reference to the Bazerman articles). Alternatively, instructors could take any relevant piece of legislation or reform in their

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<sup>8</sup> Pascal Dendooven, "KPMG Blijft Aansprakelijk voor Schade L&H. Toch Nog een Vis in het Net", *De Standaard* (September 23, 2010). For a broader discussion on the issue of corporate liability, see "Hunting Corporate Criminals," *The Economist* (August 31, 2000).

<sup>9</sup> *Ibid.* 1.

<sup>10</sup> Bazerman, M. H, K. P. Morgan, and G. F. Loewenstein, "The Impossibility of Auditor Independence," *Sloan Management Review* (Summer 1997), pp. 89–94; Moore D. A., P. E. Tetlock, L. Tanlu, and M. H. Bazerman, "Conflicts of Interest and the Case of Auditor Independence: Moral Seduction and Strategic Issue Cycling," *Academy of Management Review*, 31, no. 1 (2006), pp.10–29.

<sup>11</sup> See, for example, "Corporate Constitutions," *The Economist* (October 28, 2010).



country (such as certain aspects of the elaborate Sarbanes–Oxley Act of 2002 in the United States, say) and have a more focused discussion on how it might, or might not, have prevented any of the outcomes illustrated in the case.

### **Case Use**

Depending on the number of class periods the instructor wants to spend on the topic of ethical behavior in general, and that involved in financial reporting in particular, the L&H case could be used effectively in conjunction with other cases in this area, such as ***Don Russell: Experiences of a Controller/CFO*** (included in Chapter 14 of this textbook, *Controllers and Auditors*). The case could also be usefully taught in light of corporate governance and be paired with some of the cases listed in Chapter 13 (*Corporate Governance and Boards of Directors*).

The advantage of the L&H case is that it is real and undisguised. If the students weren't already convinced by real, current business events, this case will clearly demonstrate to them that fraud happens. Against that background, instructor may want to emphasize, if so inclined, that good ethics and good governance usually pay off in the long run.



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A213-01-TN

## **Ethics@Cisco**

### **Teaching Note**

#### ***Purpose of Case***

The Ethics@Cisco case was written to illustrate the elements, benefits, and limitations of a world-class ethics program in a large, complex, international corporation.

#### ***Suggested Assignment Questions***

1. What is the Ethics@Cisco program trying to achieve? Why does CISCO try to maintain a strong ethics program? How does it benefit the company's stakeholders?
2. A recent survey of 1,966 companies in nearly 80 countries, conducted by the Chartered Institute of Management Accountants, found that over 80% of the companies provided a code of ethics or similar document to guide their employees about ethical standards in their work.<sup>1</sup> Therefore, the Cisco Code of Business Conduct (COBC) is not unique. Why, then, is the Cisco ethics program considered one of the best such programs in the world?
3. Here are two examples of ethical issues that Cisco employees might face:
  - a. *A Cisco employee in China received a box of moon cakes as a gift from a supplier. (It is a tradition in China to give moon cake gifts at the time of the mid-autumn festival.) The moon cakes were packaged in a carved wooden box. The recipient estimated the value of the gift at approximately 600 yuan.<sup>2</sup>*

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<sup>1</sup> Chartered Institute of Management Accountants (2012). *Managing Responsible Business: A Global Survey on Business Ethics*. London: CIMA.

<sup>2</sup> 1 yuan = US\$0.16. In the United States, a comparable moon cake gift would cost approximately \$200.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid for instructors using the Ethics@Cisco case (A213-01).*

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- b. *Employees at a foreign Cisco location were asked to make a donation to a memorial fund founded by a government official, whose agency was a large Cisco customer, after his daughter died tragically.*

What would you do if as a Cisco employee you were faced with each of these situations? Would accepting the gift and making the donation comply with the Cisco COBC? To answer these questions, consult the COBC directly. The link to the COBC is shown in footnote 2 of the case.

4. Can the Cisco ethics program be improved? If so, how?
5. What, if anything, will have to change as Cisco continues to grow, perhaps doubling its number of employees in the foreseeable future?

## **Case Analysis**

**Assignment Question 1:** What is the program trying to achieve, and why?

The purpose of the Ethics@Cisco program should be obvious, but it worth stating in class. The program is designed to ensure that all Cisco employees both comply with applicable laws and regulations and behave ethically in accordance with Cisco's values. No such program can ensure 100% success, but defining and communicating acceptable behaviors and then monitoring adherence with the established norms, while punishing those who deviate, should have measurable, positive effects.

The benefits from complying with the applicable laws and regulations are obvious. If Cisco employees do not comply, the company can suffer significant fines and other penalties. In some cases, executives can be sentenced to jail.

The benefits of behaving ethically are more subtle and indirect, but real nonetheless. A strong reputation as an ethical corporation can be an advantage that differentiates it from its competitors. Current and prospective employees, customers, and suppliers all prefer to work for, or have dealings with, companies with high ethical standards. They can be trusted. The employees are all working for the corporation, not self-dealing. These superior stakeholder relations will be reflected in the stock returns, thereby benefiting the shareholders.

The awards that Cisco has won do not come automatically to companies with the best programs. Companies have to apply for the awards. Cisco managers obviously believe that it is important not only to have an excellent ethics program but also to be recognized as having an excellent ethics program.

But students should recognize that strong ethics requirements can sometimes also be a competitive disadvantage. This is especially in countries like China, Russia, and Brazil, where bribery is endemic and local corporations are not saddled with the same legal requirements and ethical burdens.

**Assignment Question 2:** What makes the Ethics@Cisco program so good?

The awards that Cisco has won provide evidence that theirs is one of the best programs of its type. While it is not clear what is in the minds of the judges when they determine the award winners, it would seem that the Cisco system is excellent in the following dimensions:

1. Tone at the top. All indications are that Cisco's CEO and other top executives truly care about ethics in the organization.
2. Effective methods of communicating desired behaviors. Cisco has spent a lot of time and efforts developing an array of materials that help employees (and agents) understand what is expected of them. These materials fit the Cisco culture, as they make extensive use of technology. Some of the materials have themselves been recognized as excellent, as they have won awards.
3. Reinforcement. All employees must certify that they have completed the COBC training and that they agree to comply with the code.
4. Continuous improvement. Cisco managers monitor the success of the company's program and are always looking for ways to improve it.

**Assignment Question 3:** Compliance with the COBC

This assignment question is designed to make the discussion of ethics less abstract. These are real situations that Cisco faced. Another goal should be to get the students to go to the Cisco COBC in hopes that they will spend some time looking at the document. It is logical, well organized, and easy to understand.

The answer to the *moon cake example* is that the employee probably can keep the gift as long as there is no implied expectation in the gift, such as to direct business to the supplier. The gift is (barely) within the gift acceptance guidelines detailed in the COBC. But to be sure, the employee should perhaps ask someone in HR or in the management hierarchy for permission to keep the gift. The fact that the gift would cost more in the United States than it costs in China is not relevant to the judgment, but it does point out some unfairness across countries.

Moon cake gifts in China are such a common occurrence, and some of the gifts are quite elaborate and expensive that Cisco has produced a video on this issue.

To make the *donation example* more salient, before listening to student answers, instructors can make sure that students understand the foreign bribery laws with which Cisco must comply, such as the U.S. Foreign Corrupt Practices Act and the UK Bribery Act, which prohibit "facilitating payments" to government officials.

However, no definitive answer to this issue can be found in the COBC. The payment is not being made directly to the government official, so it would seem not to be a direct violation of the bribery laws, although such contributions could easily be construed to be made to curry favor from the government official. Does the size of the contribution matter? Perhaps a small contribution could be deemed as acceptable but a large one, one that exceeds the Cisco gift-giving limits, might not. Without definitive guidance provided in the COBC, students should conclude that the employee should seek guidance—from someone in the Ethics Office, in the Human Resources department, or a higher-up in his/her organization.

When this issue arose at Cisco, some employees did indeed seek guidance. The question was escalated all the way to the general counsel. After evaluating the risk, the general counsel decided to allow the donations. It was determined that, since people at many other companies also made a contribution, the risk of the donation being construed as a bribe was low. They

concluded that the donations would not benefit the official or his/her family, and they thought the “optics” of the situation would not be harmful if news of the donations became public.

This example illustrates the fact that not all circumstances can be anticipated and explained in the COBC. If employees are unsure about how they should act, they should seek the guidance from others in the ethics hierarchy.

Here are some other examples that could be raised in class:

- A. *A sales manager offered a customer a discount in the future, if they place a full priced order before the end of the quarter—the deal was kept off the books in a “side letter.”*

Totally unacceptable and resulted in termination, very unlikely to be reported into ethics office.

- B. *A foreign official requested a “facilitation” payment to speed up the processing of paperwork.*

Examples might be to produce a purchase order before quarter end so that an impending sale could be counted as backlog, or to process a visa request within a day for an important visitor. Cisco considers this a gray area. The employee involved would most likely ask the legal department to determine if this is a bribe in the classic sense, designed to alter a business outcome, or just a payment designed to expedite something that would have happened anyways. This position would comply with the provisions in the Foreign Corrupt Practices Act, but it would not comply with the UK Bribery Act.

- C. *Accounting and sales worked together to structure a deal that drove a favorable pattern of revenue recognition.*

Acceptable as long it as complies with GAAP.

- D. *An employee asked a supplier for advanced invoicing so that he could spend his full budget before the end of the fiscal year. He knew that if he didn't spend it, his budget would be reduced the following year.*

Unacceptable and it will result in termination. Most likely to be caught with a SOX control, not reported to ethics, although if one person is caught, they may name more people.

- E. *An employee received a bottle of wine as a gift, and left it on his desk despite company policy that does not allow any alcohol on the premises.*

The employee was not disciplined. Company policy was changed to make an exception for gifts.

- F. *A Cisco executive made a profit by shorting Cisco stock.*

This action was detected only because the executive's brokerage notified Cisco. The executive had to pay back his profits from the deal. He did not know it was Cisco policy not to short the stock. He was warned but not terminated.

G. *Trading in company stock by employees not subject to the insider trading blackout window.*

For example, members of an acquisition team, participants in the supply chain (e.g., who recognized quickly the economic implications of the flood in Thailand). The blackout window is a technical time limit on trading for executives in certain roles. The notion of insider trading is, however, more widely applicable in principle as far as it relates to the trading of stock to one's own advantage through having access to confidential information, but that is a gray zone or hard to establish.

H. *A Cisco sales manager sold product to a middle-man in China, who subsequently diverted the product to a gray market in the United States. The middle-man in China created fake contracts for the product, and the manager insisted he had no idea the product was going to be diverted. The sales manager is a top performer.*

Because it was impossible to prove the sales manager was complicit, he will get a written warning instead of termination. If it happens again, he will be fired.

I. *An official in an airport in a foreign country asked a Cisco employee for \$20 and told her that she would not be allowed through security to catch her flight unless she paid the "fee."*

The employee paid the \$20 and reported it to legal afterwards. She was not disciplined. Legal decided it was a very low risk situation. The DOJ wouldn't be interested in something this small; they are looking for a pattern of abuse.

J. *An employee took home a company laptop for personal use and lost it.*

Employee could be terminated for misuse of company property. At the very least she will receive a written warning.

K. *Use of "red envelopes"—It is typical way to give cash gifts at the time of the Chinese New Year.*

Unacceptable and it can never give cash.

L. *Take a client to a "gentleman's club."*

Not allowable even if within expense guidelines.

***Assignment Question 4:***

As Phil Roush says in the case, "No system is perfect." No matter what they do, some employees among the 65,000+ will behave in undesirable ways. But by having a good ethics program, they can minimize the problems.

Cisco's ethics office is constantly working to improve the system. They do so by identifying patterns of issues that arise that could usefully be explained with detailed specifics in the COBC. They are looking to improve the communication of the content of the COBC. They moved in 2012 to present the COBC in a more entertaining, interactive e-book format.

### ***Assignment Question 5:***

The program appears to be scalable. Most of the communications are online. With more employees, the number of issues that arise will increase, so staff will probably have to be added to the Ethics Office and the Investigations group.

### **Other issues that might be raised in class**

1. What ethical theories/frameworks were used to develop the COBC?

It appears to be a “virtues” approach to ethics, combined with a full appreciation of compliance requirements and practicalities.

2. The COBC is published in English and 12 other languages. But Cisco operates in 165 different countries. Can employees understand the COBC, and be held accountable if they do not comply, if it is not explained in their native language?
3. The Ethics Office was first a part of the HR department. Then it moved to the Finance organization. Now it is part of a Compliance department headed by the general counsel. What are the advantages and disadvantages of each type of reporting structure?
  - HR—focus on people.
  - Finance—a lot of the issues, and particularly some really important ones, are finance-related. Internal audit could provide the resources to investigate the issues.
  - Compliance—use a legal risk assessment framework.

In any case, it is important that the Ethics Office reports high in the organization as a signal that ethics is important.

4. The Ethics Office is composed of only three people. Is that enough in a company of 65,000+ employees?
5. Is it good news or bad news that Cisco has 100–150 ethics reports per quarter? (It is both, of course.)

### ***Pedagogy***

The part of the class that is most fun is probably the consideration of some of the specific examples in the context of the Cisco system and possibly also more broadly. But it is also important to have students recognize what it takes to guide ethical behavior in a large, complex organization. Managers have to:

- Understand what they want to deem as acceptable vs. unacceptable behavior.
- Communicate those principles or values to all employees and make sure the messages have been received.
- Provide avenues for employees to get guidance regarding the “gray” areas.

- Monitor actual behaviors and punish those responsible for not following the company's rules and values.

Instructors have to decide whether to move from the specifics to the general or from the general to the specific. Either, or both, can be effective. Following the ordering of this teaching note is one logical way to have the topics unfold in class, but it is not the only way.



## Teaching Note

### SCI Ontario: Achieving, Measuring, and Communicating Strategic Success

*Professor Neil Bendle wrote this teaching note as an aid to instructors in the classroom use of the case SCI Ontario: Achieving, Measuring, and Communicating Strategic Success, No. 9B14A067. This teaching note should not be used in any way that would prejudice the future use of the case.*

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Version: 2014-11-

#### Synopsis

Spinal Cord Injury Ontario (SCI Ontario) is a not-for-profit organization that assists people with spinal cord injuries to achieve independence, self-reliance, and full community participation. In fall 2014, the current chief executive officer (CEO) has just announced his intention to retire and the organization is preparing for a replacement. The marketing manager is reviewing the performance of the organization and wishes to develop a reporting system, a monthly dashboard, based on the indicators laid out in the organization's balanced scorecard. This will allow the new CEO to manage the organization using a summary sheet of measures that highlights how it is performing on critical dimensions.

The marketing manager is giving greatest thought to the problem of measuring and reporting the success of SCI Ontario against its goal of taking a leadership role: it aims to be the expert on living with a spinal cord injury in the province of Ontario. She is trying to understand how best to assess performance against this crucial but hard-to-measure goal.

## **Positioning and Teaching Objectives**

This case is designed for an undergraduate or MBA class. It should take about 80 minutes although elements can be added or omitted for longer or shorter sessions. The case was designed for an elective on marketing reporting but is equally useful for a class in not-for-profit management.

There are three broad teaching objectives:

- To introduce not-for-profit marketing to students.
- To discuss the problems of internal reporting and get students to develop their own internal reporting dashboard.
- To highlight the problem of achieving and measuring the achievement of goals that are not easily expressed on a single dimension (i.e., goals do not relate to the bottom line of profit.). Specifically, SCI Ontario aims to have a leadership role for people living with spinal cord injuries. It wants to be the expert on this issue in the province of Ontario. How can one measure success against this goal?

## **Suggested Assignment Questions**

1. How would you deal with the problems facing Lynne-Davies as senior manager, marketing and communications?
2. Prepare a dashboard of measures for internal reporting to be used for the 2014/15 year.<sup>1</sup> One approach to this is to adopt a specific month and use fictitious data for that month. The aim of the dashboard is to allow the new CEO to manage the organization using the data it contains. Use more than one measure but avoid putting too many measures on the dashboard. (A reader should be able to easily spot what is important.)
3. Prepare a plan to develop the leadership role for SCI Ontario. How would you tackle the media? What would you do with the website? How would you engage with the community and with key opinion leaders? Critically, how would you plan to monitor your success?

## **Suggested Questions for Class Discussion**

1. What does SCI Ontario do?
2. What are hallmarks of effective management in the not-for-profit sector?
3. What is the purpose of a dashboard? What makes a good dashboard?
4. What would you do to assist SCI Ontario in its leadership role?

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<sup>1</sup> For an example of a dashboard, see Paul Farris, Neil Bendle, Phillip Pfeifer, and David Reibstein, *Marketing Metrics: The Definitive Guide to Measuring Marketing Performance*, second edition, Pearson Education, Inc. Upper Saddle River, New Jersey, February 2010.

5. How would you evaluate your success?

## **Case Analysis**

### **1. What does SCI Ontario do? (5 minutes)**

This introduces the organization and establishes that all students know some basic facts. This is a good time to ensure that the value of the organization is understood. The organization's aims should be brought to the fore. Students will understand SCI Ontario is both assisting those with a spinal cord injury to fully participate in the community and influencing the wider community to remove barriers to those with a spinal cord injury.

### **2. What are hallmarks of effective management in the not-for-profit sector? (10 minutes)**

In many ways, not-for-profit management presents more interesting challenges than managing a for-profit enterprise. The central problem for not-for-profit management is that there is no single metric against which success can be judged. A for-profit corporation may deem itself a success if it produces a large profit, but a not-for-profit may be trying to achieve a number of goals, such as highlighting the needs of the spinal cord injury community for the general public while assisting clients immediately following their injuries. The relative importance of these goals, and so what resources should be devoted to each, is a matter of judgment that is hard to reduce to an equation.

One hallmark of good not-for-profit management is low fundraising costs as a percentage of funds raised. This is not a perfect metric, however, as some causes will be simply easier to raise funds for, example children's needs versus prison reform. Clearly, if you believe in prison reform, it does not mean you are doing a bad job if you have to spend a higher percentage of your funds on fundraising. Similar to return on investment (ROI), this metric has the problem that it can be increased by managerial choices that harm the organization. Assume that there is a list of potential donors who can be contacted by mail at a cost of 10 cents per dollar raised and that this will raise \$50,000. A second list can be reached by mail at a cost of 20 cents per dollar but will raise \$100,000. Both return substantial funds for the organization, but if we sought to minimize only fundraising costs as a percentage of funds raised, we would only send mail to the first list.

The Canada Revenue Agency (CRA) suggests that fundraising costs should be less than 35 cents per dollar. This is a notoriously difficult metric upon which to compare not-for-profit organizations because of the judgment involved in accounting systems. Some may allocate some marketing and communications costs to fundraising, others not.

A not-for-profit organization should be accountable to the community it represents, but this is likely to be challenging given that the community will be diverse in its views. For example, different not-for-profit organizations take differing positions on how actively they should seek to influence legislation.

The CRA produces advice on best practices for not-for-profit organizations. The key headers are the following:

- Prudent planning processes.
- Adequate evaluation processes.

- Appropriate procurement and staffing processes.
- Managing risks associated with hiring contracted (third-party) fundraisers.
- Keeping complete and detailed records relating to fundraising activities.

The aim of SCI Ontario is not to maximize the excess of revenue over expenses. The “bottom line” in the accounts is not the equivalent of profit. Indeed, if this figure were very large it would suggest that the organization was not using enough resources to help the community it supports. Similarly, the assets of the organization should be managed, but holding more assets isn’t necessarily better. The organization should hold enough assets in reserve to cope with any difficulties that arise, such as short-term cuts to government programs or economic downturns that limit donations. That said, the aim is to help those with spinal cord injuries, and money sitting in the bank represents resources that aren’t yet being used for this end. The optimal amount of funds to hold in reserve will depend on the organization’s precise circumstances and so will differ between organizations.

This leads to a discussion of ranking systems. The ranking system in Case Exhibit 7 suggests that reserves of between three months and three years should be held. This captures the idea that some reserves are needed but that the organization isn’t there merely to maximize reserves. Some problems arise with the rankings. For example, are the reserves of a connected, but separate entity like the Ontario Paraplegic Foundation included in the ranking? Rankings, while they can provide useful information, can also require considerable judgment to create, thus bringing their credibility into doubt.

The key point of this question is that students should understand the complexity of not-for-profit management. Just because a profit isn’t being sought doesn’t make the management task easier. If anything, it makes it more difficult because a universally agreed measure of success can be hard to achieve.

### **3. What is the purpose of a dashboard? What makes a good dashboard? (30 minutes)**

This section can be delayed until after the students present the dashboards they have prepared as assignments in advance of the class. A short lecture on dashboards may help them understand the value of the approach.

Here the group should discuss the value of dashboards.

- A good dashboard should be clear, visually appealing, and tailored to the audience who will use it.
- Effective dashboards often use visual techniques to highlight key points, for example, traffic lights to show what metric is on target and what is more of a concern.
- Visually appealing dashboards are more likely to gain attention, plus they look more professional and important, increasing the chance that they will be used.
- It is critical that a dashboard is easy to read. A good dashboard fits properly on the page and doesn’t squeeze in lots of tiny pictures. Indeed, part of the benefit of using a dashboard is that it forces concentration on a relatively modest number of critical success measures.

- The dashboard should be intelligible to the reader with little effort. In practice, this means ensuring that it is intuitively organized and well labeled. The person looking at the dashboard shouldn't have to ask a lot of questions in order to interpret it.

With current technology, it is quite possible to have real-time dashboards that allow a snapshot of organizational performance at any given moment. That said, there is probably still value in establishing a regular reporting cycle to ensure that the dashboards are looked at.

In adopting a balanced scorecard approach, SCI Ontario has already performed much of the background work in establishing the dashboard. It has already established the dashboard's key measures.

After this mini-lecture, ask the students to show the dashboards they have prepared before class. I ask them to print out their dashboards and show them using a document camera. This has the advantage of forcing them to get the dashboard onto a single page. Of course, laptops can be hooked up to overhead projectors or similar if that works better with the technology available in the classroom.

This period of the class can be longer or shorter. A small breakout group of three to four students can identify the strengths and weaknesses of each dashboard. I then bring them to the front to show their dashboards and highlight best practices. Hopefully, a number of students will have developed inventive ways to show the data. One of the key points I try to emphasize is that too many numbers turn people off. Most people simply cannot process large tables of data, while a picture showing a trend is likely to be more effective at communicating a message. The dashboard should be able to tell a story of what is happening with the organization.

#### **4. What would you do to assist SCI Ontario in its leadership role? (20 minutes)**

This is where students can be creative in their marketing ideas. Note that marketing in this case includes a very broad view of the discipline. This includes public relations, media strategy, and content marketing as well as more traditional strategies to build awareness of the organization and its community.

Students may develop online strategies to raise the profile of the organization and the issues relevant to the spinal cord injury community. How does SCI Ontario plan to break through the clutter to gain attention? How can it get its message across to those who need its services? How can it engage the wider community? How different are these strategies? Not-for-profits can sometimes get free advertising.<sup>2</sup> This might be a useful avenue to explore.

Other students may explain their strategies for getting their message onto traditional media. Does SCI Ontario have a list of experts available for the media to reach at all times of day and night? Students can be pushed on the challenges of providing this service in a largely voluntary organization. Local volunteers may be excellent at raising funds or delivering the program, but this does not always mean that they make good media spokespeople. Not-for-profit organizations typically have to balance the advantage of letting local volunteers engage with the media with the problem of maintaining a strong and coherent message. Furthermore, they need to be sensitive in how they utilize their volunteers. Many work to assist people who may find it relatively hard to secure paid employment. In such cases, they will want to be especially careful

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<sup>2</sup> For example, "Google Ad Grants: Adwords for Non-Profits," [www.google.com/grants](http://www.google.com/grants), accessed November 06, 2014.

to ensure that they aren't in danger of taking advantage of their volunteers and asking them to do tasks that paid employees might undertake.

Ideas of how opinion leaders can be influenced may be raised. Again, the student should lay out who is going to undertake this. What special skills/knowledge/commitment does the person doing this have? Any useful ideas should be given credit.

##### **5. How would you evaluate your success? (10 minutes)**

This is tricky. For example, one method may be simply to monitor media mentions. This is a reasonable start, but it should be noted that not all media mentions are the same: there can be both negative and positive press. Hopefully for a not-for-profit organization, most of media mentions are positive, but even positive mentions vary in their helpfulness. SCI Ontario is keen to raise public awareness that with appropriate support (mostly in the period immediately after their injury) people with a spinal cord injury can fully participate in the community. A press story that portrays a person with a spinal cord injury without highlighting the person's ability to participate in the community, however sympathetically done, may not help SCI Ontario achieve its goal.

Students may notice that SCI Ontario uses "Change in Social Media Engagement" rather than the raw metric. Discuss why this choice was made.

Similarly, social media engagement is an indicator of engagement with the organization but is not an end in itself. For SCI Ontario, having a few but very engaged followers might be more helpful in achieving its goal than a great number of less committed followers. Thus, monitoring social media is likely to be useful but not the only thing to do.

Benchmarking against similar organizations within Ontario is another possibility. This is simplest to do online, where follower numbers and other metrics are relatively easily gathered. The trick is to find "similar" organizations. Selecting comparable organizations is far from an exact science. SCI Ontario can also benchmark against sister organizations in other provinces and countries. Looking at other organizations can also prove to be a source of new ideas.

A survey of opinion leaders or even the general public in Ontario about their knowledge of issues related to spinal cord injuries and their attitude toward SCI Ontario could be adopted. This would likely be expensive and so probably should/would be done irregularly, if at all. Students should consider the value to be gained and balance this against the cost, bearing in mind the need to be, and be seen to be, good stewards of the organization's funds.

Note that some of the other metrics already measured give some indication of how SCI Ontario is fulfilling its leadership role for example, changes to governmental policies to benefit people with a spinal cord injury.

Overall, students should recognize the challenges of assessing performance against an important but hard-to-measure goal. In effect, the message is that no metric is perfect but that the very act of setting metrics can focus an organization and at least help create a common language about its aims.<sup>3</sup>

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<sup>3</sup> Neil Bendle, "How Bad Metrics Help," *Marketing Thought*, January 18, 2013, <http://neilbendle.com/how-bad-metrics-help/>, accessed November 06, 2014.

**Wrap-up (5 minutes)**

Ask students to highlight the key points of the class:

1. The complexity of not-for-profit management.
2. The use of dashboards to manage an organization.
3. The challenges of measuring SCI Ontario's leadership role.

## University of Southern California: Responsibility Center Management System

### Teaching Note

#### *Purpose of Case*

This case was developed to illustrate some of the issues involved with the design and use of management control systems within a prominent form of not-for-profit organization. A university provides a good illustration for teaching purposes because students are familiar with the setting. The students know, intuitively, that a university's organizational goals and the methods of both generating revenues and allocating the available resources are different from those found in for-profit firms. What they may not have thought about is that not-for-profit organizations, such as universities, face many of the same managerial problems as for-profit firms in the area of controls.

The system at the University of Southern California (USC) is a particularly interesting example to study because management at USC is highly decentralized. The managers of the various organizational units, such as the deans of schools, operate with considerable autonomy. Their behaviors are controlled largely through what USC calls the Responsibility Center Management System (RCMS).

This case can also be used as a general review case on the subject of controls in decentralized organizations. The not-for-profit setting is a little different, but the process of thinking critically about a control system—comparing what is desired with what is likely—is the same. Students have to figure out what is important and ponder how to ensure that the important things are done well. The case describes performance measures with some good effects and some that are not so good.

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*Professor Kenneth A. Merchant wrote this teaching note as an aid to instructors using the University of Southern California: Responsibility Center Management System case [A208-01].*

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### **Suggested Assignment Questions**

1. Using the financial responsibility center terminology that we use in this course, what would you call USC's responsibility centers? Are they revenue centers? Profit centers? Something else?
2. The RCMS seems to be working reasonably well. USC has used it for over 25 years, and seemingly nobody wants to abandon it. What makes it effective?
3. Consider each of the criticisms of RCMS:
  - a. Does it sound plausible that the RCMS could have been causing, or at least contributing to, the problem if, indeed, there was a problem?
  - b. Which of the problems have been solved by the RCMS refinements that were implemented over the years? Which remain?
4. What should be done now? Does the RCMS create "perverse incentives"? If so, how? If not, why not?

### **Case Analysis**

I like to begin the case discussion with the big picture, clarifying what is different about managing at USC vs. a for-profit firm. Students make points like the following:

- Goal complexity. Many constituencies. The goals often conflict.
- Primary goal is not to make a profit, or maximize shareholder wealth. It is to educate students and create knowledge. The finances are just a constraint.
- Some of the entities are not economically viable on their own. They must get donations, grants, and subventions.
- Shallow management staff. Generally lower pay than in the corporate sector. Not as qualified (?).
- Many faculty members have tenure. They cannot be fired except under extreme circumstances. Managers must build consensus.
- Some funds are restricted to a specific purpose. This places extra constraints on management and an extra accounting/reporting burden.
- Monetary incentives are relatively minor. The deans can earn some bonuses based on the achievement of academic and fiscal goals, but the amounts are modest. There are no stock options. (But academic deans whose entities run a deficit two consecutive years will be immediately replaced.)

USC's strategies are designed to build on its competitive advantages, such as its urban location, its location on the Pacific Rim, and its large alumni base. This is not greatly different from a for-profit organization.

Then, to make the discussion more tangible, I have the students assemble a list of Key Recurring Decisions (KRDs) and think about who in the organization makes these decisions. They will assemble a list something like the following:

- Course offerings: What programs/courses to offer?
- Faculty and staff recruiting: Who to hire?
- Facilities: How should facilities be designed and used efficiently?
- Admissions: What students to admit, and how many to admit?
- Scholarships: Whom to give financial aid to?
- Pedagogy: How large should class sizes be?
- Resource usage: How to allocate resources across:
  - Facilities
  - Technology
  - Staff support
  - Research vs. teaching

It is not necessary to get a complete list. What is important is to recognize that most of these decisions are made within the academic Schools, so the decision-making authority is vested in the deans.

The next question to consider is how USC ensures that these decisions are made well. The primary answer is the RCMS. I find it useful to clarify the major elements of the RCMS, to make sure all students understand them. These elements include:

- Decentralization of authority to responsibility centers.
- Revenue centers keep most of the revenue they generate.
- The revenue centers pay their own expenses and a share of the shared (indirect) expenses. (It is useful to walk through **Table 1** in the case.)
- The revenue centers pay a “tax,” which creates a fund that the provost can use to keep some Schools economically viable and to fund various initiatives.
- The Inter-center Bank allows the responsibility centers to save their surpluses and fund their shortfalls on a short-term basis.

When it is clear that students understand the major element of the RCMS, attention can be focused on answers to the suggested assignment questions.

#### A. *Question 1*

USC has two types of responsibility centers, revenue centers, and administrative centers. What USC calls revenue centers are really *profit* centers because the managers of those

centers make trade-offs between revenues and expenses. That is the essential requirement of a profit center. Some students might get confused, however, because the goal for the academic revenue centers—the Schools—is not profit; it is to break even. Students should understand that they must be careful of labels, and this example provides a useful clarification.

The administrative centers within USC are cost centers. They provide a service but do not record revenues.

#### B. *Question 2*

The bulk of the case describes the principles on which the RCMS system was designed and the reasons for the various system details. It is not necessary to restate all that in this teaching note. The proper overall conclusion is that the USC system works. USC administrators are not taking any steps to abandon the system. Most importantly, it allows the academic managers—the deans—to be entrepreneurial/market-focused, but it enforces accountability. It clarifies the constraints—if there are no revenues, there are no programs. It ensures that the decision makers are closer to the consumers (the students). It provides deans with many of the right incentives, such as to attract students and to raise money. It encourages growth. It ensures that the deans (the line managers) are fiscally prudent. In addition, it seems to attract deans who are both relatively entrepreneurial and knowledgeable about finances.

#### C. *Question 3*

The case discussed six main criticisms of the RCMS: (1) discouragement of innovation; (2) discouragement of multidisciplinary research; (3) discouragement of seeking of outside grants; (4) encouragement of inappropriate courses; (5) encouragement of end-of-period financial gameplaying; and (6) inaccurate cost allocations. I have the students discuss each of these to make sure that they understand the criticisms, and then I want them to consider answers to the following questions:

- Are these problems real or imaginary?
- Are these problems important or not?
- Are these problems caused or made worse by RCMS system, or is RCMS merely being blamed for not fixing the problems?

Then it is useful to consider each of the modifications of the RCMS over the years: (A) centralization of general education (GE) courses; (B) centralization of doctoral program finances; (C) removal of constraints on capital investments; (D) reducing (and then increasing) the participation “tax”; (E) modification of cost allocation methods; and (F) increased flexibility in use of Inter-center Bank funds. I want to make sure that the students understand each of these changes and their effects.

At the end of this discussion, to summarize, I put the Figure TN-1 (appended to this teaching note) on the document camera. I ask students if any of the criticisms of the RCMS have been addressed by the refinements made to the RCMS over the years. There are some direct links, including 4 to A, 5 to F, and 6 to E, and I draw lines showing these links on the figure. But students will see that some of the criticisms have not been addressed/solved. That leads directly into the discussion of Assignment Question 4.

D. *Question 4*

As students see that not all of the criticisms have been addressed, they will have various suggestions to “improve” the system.

Another way to critique the system is to reconsider the original nine management principles. Are they appropriate, and have they been faithfully and effectively applied?

Some instructors find it useful throughout the discussion to steer the students into looking at these issues from various perspectives (i.e., a faculty member, a dean, the central administration, the provost, or an alumnus). Making the students take on different roles allows them the opportunity to understand the complexities involved in managing any organization, and particularly a large, complex not-for-profit organization.

In the end, I think the correct conclusion is that the RCMS system is working well. USC administrators are constantly critiquing the system and modifying it. But the modifications are relatively minor. There are no efforts underway to abandon the RCMS system, to return to the days of highly centralized management. USC appears to be performing well: The university is growing; it is fiscally strong; and it is rising rapidly in many important rankings. Certainly the RCMS can be improved further, but no system will ever be perfect.

It is interesting to note toward the end of class that very few colleges and universities use a decentralized responsibility center system like RCMS. To be sure, there are some prominent examples of universities that do—such as Harvard, the University of Pennsylvania, and Indiana University—but only a few. Obviously many fine universities do not use such a decentralized system. To stimulate thought, instructors can ask: “If RCMS provides USC with a comparative advantage, why haven’t more universities implemented something like it?” The most important answers are probably that implementing and maintaining an RCMS-like system is quite difficult, and most academic administrators would rather focus their attention on other matters. Plus, they like retaining much of the power centrally.

### ***Pedagogy***

Encouraging student participation when using this case is not difficult. Seemingly, every student has ideas about how a university should be managed. There are lots of issues in the case. The main challenge for instructors is to determine what issues to focus on and how to allocate time across them.

It is certainly not necessary, nor perhaps even possible, to obtain a consensus by the end of the class period. The most important purpose for the class is to help students understand the process of how to evaluate a complex system like RCMS. Students should see that the evaluation should involve a comparison of what is desired with what is likely. If a significant discrepancy exists, then changes should perhaps be made. But the suggestions made should be realistic as far as implementation, general acceptance, and costs are concerned.

**Figure TN-1**

<u>Criticisms of RCMS over the years</u>	<u>RCMS refinements over the years</u>
1. Discouragement of innovation	A. Centralization of GE courses
2. Discouragement of multidisciplinary research	B. Centralization of doctoral program finances
3. Discouragement of seeking of outside grants	C. Removal of constraints on capital investments
4. Encouragement of inappropriate courses	D. Reducing (and then increasing) the participation "tax"
5. Encouragement of end-of-period financial gameplaying	E. Modify cost allocations
6. Inaccurate cost allocations	F. Flexibility in use of Inter-center Bank funds