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INSTRUCTORS' EDITION

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JOURNAL OF THE INTERNATIONAL ACADEMY FOR CASE STUDIES

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LETTER FROM THE EDITOR

Welcome to the *Journal of the International Academy for Case Studies' Instructor's Edition.* The editorial content of this journal is under the control of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The purpose of the *JIACS* is to encourage the development and use of cases and the case method of teaching throughout higher education. Its editorial mission is to publish cases in a wide variety of disciplines which are of educational, pedagogic, and practical value to educators.

The Instructors' Notes contained in this volume have been double blind refereed with their corresponding cases. Each case for which there is an Instructors' Note contained herein has been previously published in an issue of the *Journal of the International Academy for Case Studies*. Each case was required to have a complete teaching note before consideration. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies. This publication also conforms to the AACSB requirements to publish case notes which are considered by that body to be of more academic value than the case itself.

If any reader is interested in obtaining a case, an instructor's note, permission to publish, or any other information about a case, the reader should correspond directly with the author(s) of the case.

The Academy intends to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

The Editorial Policy, background and history of the organization, and calls for conferences are published on our web site. In addition, we keep the web site updated with the latest activities of the organization. Please visit our site and know that we welcome hearing from you at any time.

Inge Nickerson, Barry University
Charles Rarick, Barry University

CASE NOTES

DHR PATIO HOMES, LLC: "FOR THE SAKE OF A NAIL, THE KINGDOM WAS LOST!"[1]

Herbert Sherman, Southampton College – Long Island University
Daniel J. Rowley, University of Northern Colorado

CASE DESCRIPTION

This is a field-based disguised case which describes the attempts of a small residential construction company to close on a large land deal, a deal that would net them over four million dollars in 12-16 months. The problem for the characters in question is how to raise the $2.5 million dollars needed to purchase the property. Every time the protagonists believed they have resolved the situation, another problem with the loan is introduced. Several factors complicate the transaction: the lending institution changed the loan down payment from 10% to 20%, the protagonists had transactional difficulties in terms of physically acquiring their down payment, and one of the lenders at the last minute insisted on a $50,000 set aside to be placed in an escrow account. The case has a difficulty level appropriate for a sophomore or junior level course. The case is designed to be taught in one to two class periods (may vary from fifty to one hundred minutes depending upon instructional approach employed, see instructor's note) and is expected to require between four to eight hours of outside preparation by students (again, depending upon instructor's choice of class preparation method).

CASE SYNOPSIS

Derived from observation and field interviews, the case describes how two college professors operating a home construction LLC are trying to close on a major land deal ($2.5 million dollars) that would net them over $4 million dollars in estimated profits in a 12-16 month time period. These professors have no experience in raising funds but luckily have the assistance of Justin Martin, the President of the Snowy Mountains, the firm that they will be purchasing their subdivision from (Mountain Trails). Through Justin Martin's connections Stephen Hodgetts and Richard Davis meet with Benefit Bank and arrange for the loan. Davis was under the impression that the bank required a 10% down payment ($250,000) which Davis and Hodgetts finally raise by borrowing on their retirement accounts and liquidating Hodgetts' stock holdings. However, the bank actually required a 20% down payment since Davis and Hodgetts were new customers. Justin Martin promised to lend Davis and Hodgetts this amount ($250,000) as a same day loan to be paid back by them from the proceedings of their closing on Justin Martin's mother-in-law's house. At the last minute,

however, Justin Martin insisted that Davis and Hodgetts deposit $50,000 in an escrow account; $50,000 that Davis and Hodgetts did not have access to for at least a few days after the closing date. The case ends with Davis wondering how he is going to raise $50,000 in one day.

INSTRUCTORS' NOTES

Overview

The case subtitle, "for the sake of a nail the kingdom was lost" perhaps best summarizes Davis and Hodgetts' situation in that they are on the cusp of a deal that would propel this small, startup home builder into a full-fledged operation. The estimated profits from this project would be quite substantial and could be used in funding future ventures with the same developer. Furthermore, the timing of this project could not have been better for Davis and Hodgetts since their current development was having legal problems (there were large third party liens on their properties because the land developer did not pay his landscapers). They could not close on their currently constructed homes and it therefore made no sense to build new homes on these properties.

However this "deal of the century" is not an easy one to make given the purchase price of the subdivision ($ 2.5 million) and Davis and Hodgetts' inexperience in raising venture capital. An interesting twist in the case is that Davis and Hodgetts seemed to have found themselves a benefactor and a possible mentor in Justin Martin, the President of Snowy Mountains. Justin first connects them with a lender and then offers Davis and Hodgetts a one day loan using his own money. Ironically, each deal that Justin brokers (the Benefit Bank loan and his own personal loan) seems to have a hidden catch or caveat (including his own) creating last minute problems for Davis and Hodgetts. The case seems to be a comedy (or tragedy) of errors in that every time Davis and Hodgetts think that they have solved one problem related to the purchase of the Mountain Trails subdivision, another unexpected problem rears its ugly head and threatens to ruin the land deal.

Intended Instructional Audience & Placement in Course Instruction

This case was primarily developed for undergraduates taking a course in Small Business Management and/or Entrepreneurship (SBME) although it could also be employed in any course that deals with the raising of venture capital (i.e. Corporate Finance, Venture Capital Investing) and investing in real estate (Real Estate Management). The case should be introduced after students in the SBME class have read the chapters on how to obtain financing for your business, profit planning, and business growth and the entrepreneur (Chapters 6, 13 in Megginson, Byrd, and Megginson, 2003; Chapters 6, 10 in Lambing and Kuehl, 2003) while Corporate Finance students should be familiar with the topics of sources of capital, cost of debt, and income statements (Chapters 4, 9, 13 in Gallagher and Andrew, 2003; Chapters 2, 9, 12, 14 in Keown, Martin, Petty, and Scott, Jr., 2005).

Since the case covers numerous chapters in each text, it is recommended that the case be employed as a sectional or comprehensive case rather than an end-of-chapter case.

Secondarily, the case could also be employed in a Business Policy and Strategy course under the topic of strategy implementation; business tactics at the functional level. These students should therefore be exposed to functional tactics with a focus on business financing (Chapter 9 in Pearce and Robinson, 2005; Chapter 6 in Harrison and St. John, 2004).

Learning Objectives

The overall purpose of this case is to introduce students to the nuances associated with managing a small business in the home construction market, specifically the difficulties associated with raising capital for land acquisition. Furthermore, an additional goal is for students to be able analyze DHR's projected profits from the land deal (based upon construction costs and the cost of capital) and determine the general viability (and therefore the value to DHR) of the land acquisition.

Students obtain a "real-world" feel of the situation and tacitly experience some of the frustration associated with trying to close a business deal when one is highly dependent upon other parties' actions. Specific learning objectives are as follows:

1. For students to obtain a basic understanding of the real estate development and residential construction industries.
2. For students to understand and appreciate the difficulties in raising investment capital.
3. For students to determine the profitability of the residential construction project taking into account the cost of capital, taxes, land acquisition costs, and construction costs.
4. For students to understand the importance of cash flow in this type of business and determine what Davis and Hodgetts' cash flow needs might be if they were close on this land deal.
5. For students to develop recommendations on how Davis and Hodgetts should proceed in closing this land deal.

TEACHING STRATEGIES

Preparing the Student Prior to Case Analysis

There are several approaches, none of which are mutually exclusive, that an instructor may employ in terms of utilizing this case. It is strongly recommended that, regardless of which course this case is to be employed with, students should have some exposure to the home construction business and residential land development. The Urban Land Institute provides an excellent handbook on real estate development (Peiser and Frej, 2003) while Gerstel's (2002) builder's guide provides a good overview to the home construction business. Both texts have short introductions to the topics

that could be copied and distributed to the class as background material. A one page handout is provided at the end of this teaching note with short descriptions of each industry – see Appendix 1.

Secondly, it is also recommended that students have some grounding in some basic financial analysis techniques including breakeven analysis, internal rate of return, and net present value. This will be useful in analyzing the profitability of DHR's proposed project. This information may be delivered prior to assigning the case by using at least one (1) of the follow methods:

- a short lecture, student presentation, discussion session, and/or reading assignments on aforementioned topics.
- a guest lecturer from a local builder and/or land developer on project development.
- a guest lecturer familiar with raising venture capital (i.e. a representative from the SBA,
- a local lending institution, a venture capitalist, etc…)

Case Method

Although most of the students in a small business management or introductory finance course may have had some exposure to the case method, it behooves the instructor to provide the students with a review to the case method of analysis. In the traditional case method, the student assumes the role of a manager or consultant and therein takes a generalist approach to analyzing and solving the problems of an organization. This approach requires students to utilize all of their prior learning in other subject areas although the focus should be on the current course content. It is strongly suggested that students prepare for the case prior to class discussion, using the following recommendations:

- allow adequate time in preparing the case
- read the case at least twice
- focus on the key issues
- adopt the appropriate time frame
- draw on all your knowledge of business. (Pearce and Robinson, 2005)

The instructor's role in case analysis is one of a facilitator. The instructor helps to keep the class focused on the key issues; creates a classroom environment that encourages classroom discussion and creativity; bridges "theory to practice" by referring back to key concepts learned in this or prior courses; and challenges students' analyses in order to stimulate further learning and discussion. There are several variations of the aforementioned approach including: written assignments, oral presentations, team assignments, structured case competitions, and supplemental field work. (Nicastro and Jones, 1994)

Regardless of the variation employed, it is recommended that the students' work be evaluated and graded as partial fulfillment of the course's requirements. However, if this case is not employed as a comprehensive case, it is not recommended that this case (and its related assignments) have a large weight or impact on students' overall course standing.

Using Case Questions

Whether or not the instructor assigns questions for students to analyze with the case is usually a matter of educational philosophy and student readiness. Naumes and Naumes (1999), for example, thought that if the questions were handed out with the case "students will tend to focus only on the issues specifically raised by the questions …" (p.86). Lynn (1999), on the other hand, noted that the use of assignment questions provided students with more concrete guidance in case preparation and analysis; specifically directing them to consider the decision to be reached.

In deciding whether or not to assign questions, the instructor should first answer the following questions:

1. What is the level of course instruction?
2. What type of case is being taught? (Iceberg, incident, illustrative, head, dialogue, application, data, issue, or prediction – see Lundberg et. al., 2001 for full descriptions.)
3. What is the instructor's preliminary assessment of the students' ability to be self-directed learners?
4. What are the students' previous experience with case instruction?
5. If the students have already been exposed to the case method, what types of cases have they been exposed to? Case incidents (1-2 page cases with questions)? Short cases (3-8 page cases with and/or without case questions? Comprehensive cases (greater than 8-15 pages) Harvard-style cases (greater than 15 pages)? (David, 2003)
6. What is the instructors preferred method for case instruction? (For example, "sage on the stage", "guide on the side", "student as teacher" (student-lead discussions), "observer and final commentator" (open class discussion with faculty summation), etc….

Role-Playing (50 minutes)

Role-playing enacts a case and allows the students to explore the human, social, and political dynamics of a case situation. This case lends itself quite well to a role playing exercise since it involves a rather simple situation with only two characters and therefore most of the class can role play in this exercise.

Prior to role-playing the case part, students should be asked to not only read the case part but to answer the following questions:

1. Who are the key participants in the case? Why?
2. What is the "role" of each of these participants in the organization?
3. What is their motivation or rationale for their behavior?
4. What is the dilemma that the character is facing and/or how can the character assist someone else in solving a problem?

The instructor may either go through these questions prior to case enactment or wait for the role playing exercise to be completed in order to use this material to debrief the class.

Step 1: Assignment of Roles & Instructions (10 minutes). The class should form groups of three students with two of the students enacting the key roles in the case and the other acting as observer. The instructor should pass out a short reminder notice about participants staying within their roles.

Step2: Enactment (20 minutes). The student enacting the role of Davis should be instructed to start the conversation, summarizing the situation for Hodgetts. The instructions to the students playing Davis is that really wants this deal to go through and will do anything within reason to make it happen. The instructions to the students playing Hodgetts is that although his is for pursuing this deal, he is not at all happy that he has had to liquidate his stock holdings and the he has become suspicious of Justin Martin's behavior. The instructor should note how well each groups enacts the role-play and offer suggestions (if necessary) if some groups seem a bit confused or lost.

Step 3: Debriefing (20 minutes). The instructor might want to ask the following questions:

- What was the results of the exercise? Did Davis and Hodgetts solve their problem?
- How many groups ended up needing to with Justin Martin? If so, why?
- How many groups decided they needed to contact a lawyer, an accountant, or an alternative funding source?
- Did Davis and Hodgetts agree or disagree as to whether they should finally go through with the land deal? If the disagreed, what were the reasons?
- If Davis and Hodgetts did disagree, and Hodgetts backed out of the deal, did Davis try to make the deal happen anyway?

The instructor should then have the class as a whole comment on the results of the role-play and determine with the class their overall sentiment towards DHR's last minute problem. Students should also be given the opportunity to comment on the role-playing exercise as a learning instrument. The instructor might ask the class the following questions:

- Did this exercise animate the case? Did students get a "feel" for the issues surrounding the business offer?

- What were the strengths and weaknesses of the exercise? What changes would they make to the exercise given their experiences with it?

The debriefing session should produce closure for students by connecting the theory of capital formation and raising venture capital with case specifics and the results of the role-playing exercise.

Suggested Case Questions

1. Before Davis and Hodgetts received Justin Martin's assistance in raising capital, they assigned themselves the task of researching methods of raising capital. Describe some of the methods that Davis and Hodgetts could use to raise the $2.5 million dollars needed to purchase Mountain Trails.

This question requires that students do some reading and research, even beyond the handout supplied in the teaching note (Appendix 2). The *below average student* in answering this question will provide a laundry list of methods of raising capital without differentiating between equity and debt financing. This student will also list alternatives that are not available to Davis and Hodgetts given their corporate structure (LLC) such as going public and issuing common and preferred stock, or selling corporate bonds.

The *average student* will discuss the typical methods that small business use to raise funds (self, family, friends, angel and venture capitalists, bank loans, and SBA guaranteed loans) in general terms and perhaps reference Hodgetts' ability to loan the firm $250,000.

The *above average student* will note that far more information is needed about the personal and business financial situation of both Davis and Hodgetts in order to determine what assets of theirs may be available for leveraging. They may suggest that it may be possible for Davis's and Hodgetts' two other firms to borrow these funds (presumably from their own commercial bank) or open a line of credit without looking for other funding sources. These students also may suggest taking on a business partner who has the capital.

The exceptional student will try to raise the funds creatively or look at rarely used methods. For example, "a new and emerging kind of equity financing is the Small Company Offering Registration … [this] lets a company raise up to $1 million by selling common stock directly to the public." (Megginson, Byrd, and Megginson, 2003, p. 147.) In terms of debt equity, this student might suggest locating small business investment companies (SBICs), firms regulated by the SBA to make venture investments in small firms. Furthermore , this student would note what investors and lenders would look for before, see TN Table 1 below.

TN Table 1: What Investors and Lenders Look for from a Small Business	
Investor	Lender
The ability of the owners to be team players.	Ability to pay back the loan through cash flow – income.
Flexibility of owners and their ability to accept possible new management.	Amount of collateral available to secure the loan.
Commitment to the new project/business.	Track record of repaying loans – credit history.
Acceptance of constructive criticism/feedback/ assistance.	Business and/or Marketing Plan.
Fixed and realistic short term and long term goals.	Stability of the business and/or owners.
* Adopted from Megginson, Byrd, and Megginson, 2003, p. 157-8.	

Lastly, this student might also recommend that Davis and Hodgetts seek a new partner with capital.[1]

2. Estimate the total average net profitability for the Mountain Trails project using the data from Table 2, Estimated Profits from Mountain Trails Subdivision.

The purpose of this question is to ascertain whether students can a) estimate what the average profit would be per unit in the development; b) whether students understand that net profit requires that taxes and interest payments be deducted from the gross profit amount denoted in Table 2; and c) that students can calculate the interest associated with a 12-16 month loan and understand the need to make certain assumptions about the loan payment schedule.

The below average student might either conclude that the minimum profit is the average profit or may need some personal guidance in order to start analyzing this question. *The average student* should be able to calculate the average total profit of the project by first averaging the profit from each of the units (See TN Table 2 below) and then adding on the additional profit for lakeside units.

This is a very basic methodology and excludes interest expenses as well as taxes.

The above average student will realize that interest expenses have not been deducted from the gross profit margin as calculated above. In terms of calculating interest expenses, the student may overlook the one day loan of $200,000 ($250,000 loan - $50,000 collateral; 6%/365 days x $200,000 = $32.86) while realizing that they do not have an exact repayment schedule in terms of either monthly amount or in terms of number of months (estimated between 12-16 months). However, they do know the following: interest rate (6%), amount borrowed ($2.5 million), amount of down payment ($500,000), and the minimum payment

is interest only. The student may therefore decide on one of many loan repayment schedules based upon his or her assumptions about Davis's and Hodgetts' cash flow needs and estimated completion time of the project. For demonstration purposes, we have assumed a straight line 12 month repayment schedule. See TN Table 3.

TN Table 2: Calculating Net Profit of Mountain Trails – Below Average Student

Models	Profit
Pine	$ 123,900
Spruce	$ 116,900
Cedar	$ 125,900
Elm	$ 125,900
Sierra	$ 146,000
Olympia	$ 106,900
Aspen	$ 126,800
Vail I (no bonus room)	$ 135,300
Vail II	$ 108,500
Total	$1,116,100
Average (Total/9)	$ 124,011

Total Average Profit = 33 lots ($124,011/per lot) + 7 lakeside lots ($89,000)
= $4,092,367 + $623,000
= $4,715,367

Given the total interest charges of $65,594.31, the estimated average profit after interest would be $4,649,772.70 ($4,715,367 - $65,594.31).

The well above average student will also note that there may be tax liabilities associated with the profits derived from the project. Calculating the tax liability on $4,649,772.70 also requires that the student make several assumptions and also understand tax liabilities for LLC's. First, the student should recognize that the tax liability of the firm is not a function of the project but is a function of total revenues minus total costs during the firm's tax year. There is no financial data (income statements or balance sheets) in the case that will assist students in determining the firm's overall profits and losses and therefore students may make some assumptions in order to proceed.

Second, some students may assume that since Justin Martin has talked about future projects with Davis and Hodgetts, that DHR would reinvest all of its profits into land purchases and therefore avoided any tax liabilities. Given the difficulties that DHR has had

obtaining a $2.5 million dollar loan in order to get this first project off the ground, using internal assets for future purchases is a highly likely strategy.

TN Table 3: Loan Amortization Schedule - $2 million @ 6% for one year (12 payments)

	Loan Amount	$2,000,000.00		Loan Summary		
	Annual Interest Rate	6.00 %		Scheduled Payment	$ 172,132.86	
	Loan Period in Years	1		No. of Payments	12	
	No. of Payments Per Year	12		Total Interest	$ 65,594.31	
Pmt No.	Beginning Balance	Scheduled Payment	Total Payment	Principal	Interest	Ending Balance
1	$2,000,000.00	$ 172,132.86	$ 172,132.86	$ 162,132.86	$ 10,000.00	$1,837,867.14
2	1,837,867.14	172,132.86	172,132.86	162,943.52	9,189.34	1,674,923.62
3	1,674,923.62	172,132.86	172,132.86	163,758.24	8,374.62	1,511,165.38
4	1,511,165.38	172,132.86	172,132.86	164,577.03	7,555.83	1,346,588.34
5	1,346,588.34	172,132.86	172,132.86	165,399.92	6,732.94	1,181,188.43
6	1,181,188.43	172,132.86	172,132.86	166,226.92	5,905.94	1,014,961.51
7	1,014,961.51	172,132.86	172,132.86	167,058.05	5,074.81	847,903.46
8	847,903.46	172,132.86	172,132.86	167,893.34	4,239.52	680,010.11
9	680,010.11	172,132.86	172,132.86	168,732.81	3,400.05	511,277.31
10	511,277.31	172,132.86	172,132.86	169,576.47	2,556.39	341,700.83
11	341,700.83	172,132.86	172,132.86	170,424.36	1,708.50	171,276.48
12	171,276.48	172,132.86	171,276.48	170,420.09	856.38	0.00

Third, some students who have researched the tax laws may find that the Jobs and Growth Reconciliation Act of 2003 changed the provisions concerning bonus depreciation (depreciation you can take against brand new business property) allowing for a 50% depreciation of property if purchased between May 5, 2003 and before January 1, 2005. (Mancuso, 2004) This would allow DHR to immediately depreciate $1.25 million dollars as expenses and reduce their overall profitability and therein their tax liability.

Most importantly, *the exceptional student* will realize that for all LLC's, profits and losses pass through the corporation to the personal tax returns of the owners, with the profits and losses allocated by percentage ownership. Since the question asked for average corporate profits from the project, not for the owners, tax liabilities are not an issue. These students may note, however, that if there were profits, these profits would become tax liabilities for Davis and Hodgetts. Therefore Davis and Hodgetts would have to weigh these tax liabilities against the tax liabilities associated with becoming a C corporation. This analysis would have to then compare the personal tax rates of Hodgetts and Davis against

the corporate tax rate of 15% (Mancuso, 2004) plus any addition tax liability associated with declared dividends, the cost of converting to a C corporation, as well as the additional administrative expenses associated with maintaining the records of a C corporation.[2]

Looking at Table 3, these students may also question Davis and Hodgetts's ability to repay the loan beyond interest only payments given their cash flow needs, at least for the first three months of operation. Specifically, these students might challenge Davis and Hodgetts' ability to pay $ 172,132.86 per month for the first three months since they would only be drawing slightly more than enough money from their clients' Single-Close Construction-To-Permanent Loan to pay for the land purchases plus their construction expenses. The next question will deal with cash flow needs for the business.

3. Assume that DHR can obtain the additional $50,000 and make the deal for Snowy Mountains. Also assume the project will take 12 months. Describe DHR's monthly cash flow needs for this project in light of Davis and Hodgetts' financial position. [3]

The purpose of this question is to have students analyze the possible cash flow implications of the land deal on DHR. DHR will have the cost of construction covered due to their customers' construction loans, however they still must service both the loan for the land and the loan from Justin Martin.

The below average student will either not attempt this question, require assistance in order to start working on this question, or assume that the cash flow of the firm will be solely the monthly interest payments on the land purchase.

The average student would assume that for the first three months of the project DHR would only receive revenues through their customers' construction loans to offset construction costs including each property's land purchase. DHR would then have expenses equal to the monthly interest payment on approximately $1.91 million ($2.5 million - $500 thousand down payment and - $90 thousand for land reimbursement; @ 6% per annum = $9550/month) and the repayment of Justin Martin's loan. They may also assume that by the time DHR would have to make their first payment to the bank (the next month) that Davis and Hodgetts' TIAA-CREF funds would be available to them, $100,000. From these funds they could easily cover three months' worth of interest only payments as well as pay part of Justin Martin's loan back, say $50,000, leaving them a little over a $20,000 cushion.

The above average student would go beyond this analysis and try to analyze the cash flow needs for the entire project. Once three months had passed and homes had been built (assuming there were no delays in construction), the minimum profit that DHR could expect would be $106,900 per home. An additional $89,000 for seven homes would be generated from lakefront properties. There are several assumptions that have to be made by these

students including the number of homes to be built simultaneously and when the lakeside homes would be built.

For example, these students might assume that over the remaining time period that at least three homes would be completed per month for seven months (21 homes) and that four homes per month would be completed for the following three months (12 homes). They might also assume a worst case scenario for revenue generation, that the lakeside homes would be built only in the last two months. See TN Table 4, below.

TN Table 4: Revenue Influx from Snowy Mountains Development

End of Project Month	# of Homes	Building Profit	Land Revenue	Lakefront Revenue	Total Revenue
3	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
4	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
5	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
6	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
7	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
8	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
9	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
10	4	$ 427,600.00	$ 304,000.00	$ -	$ 731,600.00
11	4	$ 427,600.00	$ 304,000.00	$ 267,000.00	$ 998,600.00
12	4	$ 427,600.00	$ 304,000.00	$ 356,000.00	$ 1,087,600.00
Totals	33	$ 3,527,700.00	$ 2,508,000.00	$ 623,000.00	$ 6,658,700.00

These students might recommend that by the end of the third month that DHR pay off the remainder of their loan to Justin Martin ($150,000), and Davis and Hodgetts' loan from TIAA-CREF ($ 100,000). They might then recommend that Davis and Hodgetts make nine equal payments toward the loan until the loan was paid off. See TN Table 5, below. These students might also observe that the profit generated from the project would then be calculated as follows:

Profit = Project Revenues – Land Costs – Interest Costs (3 months Interest only + 9 months)
$ 4,078,367.61 = $ 6,658,700 - $ 2,500,000 - $ 80,332.49 ($ 30,000+ $ 50,332.49)

TN Table 5: Loan Amortization Schedule - $2 million @ 6% for 9 months

Analysis

Amount financed	2,000,000.00
Annual interest (e.g., 8.25)	6.00
Monthly payments	$227,814.72
Total number of payments	9
Principal amount	$2,000,000.00
Finance charges	$50,332.49
Total cost	$2,050,332.49

Pmt No.	Beginning Balance	Interest	Principal	Balance	Accumulative Interest	Accumulative Principal
1	2,000,000.00	10,000.00	217,814.72	1,782,185.28	10,000.00	217,814.72
2	1,782,185.28	8,910.93	218,903.79	1,563,281.48	18,910.93	436,718.52
3	1,563,281.48	7,816.41	219,998.31	1,343,283.17	26,727.33	656,716.83
4	1,343,283.17	6,716.42	221,098.31	1,122,184.86	33,443.75	877,815.14
5	1,122,184.86	5,610.92	222,203.80	899,981.07	39,054.67	1,100,018.93
6	899,981.07	4,499.91	223,314.82	676,666.25	43,554.58	1,323,333.75
7	676,666.25	3,383.33	224,431.39	452,234.86	46,937.91	1,547,765.14
8	452,234.86	2,261.17	225,553.55	226,681.31	49,199.08	1,773,318.69
9	226,681.31	1,133.41	226,681.31	(0.00)	50,332.49	2,000,000.00

The exceptional student would make several cautionary comments before proceeding in their analyses. First, that although the construction costs are covered by the home buyer's construction loan, there may still be some out-of-pocket expenses that DHR will have to assume since construction loan payments may not based upon actual construction expenses but based upon a fixed payment schedule of the estimated percentage of project completion. (See Appendix 3 – Basic Construction Loan Draw Schedule and Formula)

Second, this student might also indicate that there may be other expenses not accounted for in the construction costs that might be incurred by DHR that may impact cash flow. The case specifically mentions a $1000 sales commission and rental fees for show homes (for those homes already built) but there may be other expenses incurred, most probably indirect expenses, that may not be accounted for. Furthermore, the cost of certain critical construction items may go up over time (i.e. wood, plaster board, etc…) as well as the cost of some of the subcontractors. DHR will not be able to pass these expenses along to their customers if those customers have already closed on their houses.

Third, and most important, there may be several delays in starting and completing this project (weather, availability of subcontractors and materials) and therefore a three month home building schedule may be unrealistic.[4] A longer completion schedule would

negatively impact the cash flow since the reimbursement schedules would be spread out over a longer time period thereby increasing the cost of the overall project. This student might allow for an additional month for home building (four months total) and the maximum time allowed to repay the loan (16 months). See TN Tables 6 and 7 below for the recalculation of the building and loan repayment schedule.

Profit = Project Revenues – Land Costs – Interest Costs (4 months Interest only + 12 months)

$ 4,042,640.30 = $ 6,658,700 - $ 2,500,000 - $ 116, 059.74 ($ 30,000 + $ 86059.74)

TN Table 6: Revenue Influx from Snowy Mountains Development (16 Months)

End of Project Month	# of Homes	Building Profit	Land Revenue	Lakefront Revenue	Total Revenue
3	0	$ -	$ -	$ -	$ -
4	2	$ 213,800.00	$ 152,000.00	$ -	$ 365,800.00
5	2	$ 213,800.00	$ 152,000.00	$ -	$ 365,800.00
6	2	$ 213,800.00	$ 152,000.00	$ -	$ 365,800.00
7	2	$ 213,800.00	$ 152,000.00	$ -	$ 365,800.00
8	2	$ 213,800.00	$ 152,000.00	$ -	$ 365,800.00
9	2	$ 213,800.00	$ 152,000.00	$ -	$ 365,800.00
10	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
11	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
12	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
13	3	$ 320,700.00	$ 228,000.00	$ -	$ 548,700.00
14	3	$ 320,700.00	$ 228,000.00	$ 89,000.00	$ 637,700.00
15	3	$ 320,700.00	$ 228,000.00	$ 267,000.00	$ 815,700.00
16	3	$ 320,700.00	$ 228,000.00	$ 267,000.00	$ 815,700.00
Totals	33	$3,527,700.00	$ 2,508,000.00	$ 623,000.00	$6,658,700.00

TN Table 7: Loan Amortization Schedule - $2 million @ 6% for 16 months

Analysis

Amount financed	$2,000,000.00
Annual interest (e.g., 8.25)	6.00
Monthly payments	$ 30,378.73
Total number of payments	16
Principal amount	$2,000,000.00
Finance charges	$ 86,059.74
Total cost	$ 2,086,059.74

Pmt No.	Beginning Balance	Interest	Principal	Balance	Accumulative Interest	Accumulative Principal
1	2,000,000.00	10,000.00	120,378.73	1,879,621.27	10,000.00	120,378.73
2	1,879,621.27	9,398.11	120,980.63	1,758,640.64	19,398.11	241,359.36
3	1,758,640.64	8,793.20	121,585.53	1,637,055.11	28,191.31	362,944.89
4	1,637,055.11	8,185.28	122,193.46	1,514,861.65	36,376.59	485,138.35
5	1,514,861.65	7,574.31	122,804.43	1,392,057.22	43,950.89	607,942.78
6	1,392,057.22	6,960.29	123,418.45	1,268,638.78	50,911.18	731,361.22
7	1,268,638.78	6,343.19	124,035.54	1,144,603.24	57,254.37	855,396.76
8	1,144,603.24	5,723.02	124,655.72	1,019,947.52	62,977.39	980,052.48
9	1,019,947.52	5,099.74	125,279.00	894,668.52	68,077.13	1,105,331.48
10	894,668.52	4,473.34	125,905.39	768,763.13	72,550.47	1,231,236.87
11	768,763.13	3,843.82	126,534.92	642,228.21	76,394.29	1,357,771.79
12	642,228.21	3,211.14	127,167.59	515,060.62	79,605.43	1,484,939.38
13	515,060.62	2,575.30	127,803.43	387,257.19	82,180.73	1,612,742.81
14	387,257.19	1,936.29	128,442.45	258,814.74	84,117.02	1,741,185.26
15	258,814.74	1,294.07	129,084.66	129,730.08	85,411.09	1,870,269.92
16	129,730.08	648.65	129,730.08	(0.00)	86,059.74	2,000,000.00

This student would finally note that given the projected cash flows Justin Martin would be paid off one month later and that this new payment schedule would result in a loss of $ 35,727.31 as compared to a 12 month schedule.

4. Develop recommendations on how Davis and Hodgetts should proceed in closing this land deal.

This question gets to the heart of the case; can Davis and Hodgetts raise $50,000 in one day in order to make this profitable deal go through, and if not, what other options are

available to them? The questions asks students to struggle with the facts of the case and to develop some creative solution strategies.

The below average student will have Hodgetts and Davis run around 'willy-nilly' so to speak in order to raise the funds from traditional sources most small businesses would deal with; friends, family, and local lending institutions. They may also suggest that Davis and Hodgetts borrow the money 'off the street,' that is, use illegal lenders (loan sharks) who would charge a rather hefty fee (5% a week, O'Connor, 1997). Given Hodgetts and Davis' profession (college professors), one would find the later solution highly unlikely.

The average student would have Hodgetts and Davis first try to talk Justin Martin out of requiring the $50,000 down payment or to increase the loan to $300,000. Given the information provided in the case in terms of Mr. Martin's overall assistance to DHR in raising capital, as well as his insistence on the down payment, *better students* might predict that this approach would exacerbate the situation and possibly not only kill this deal but all future dealings with Justin Martin.

The above average student would suggest calling Justin Martin, explaining the situation in detail, and then asking for Mr. Martin's assistance in resolving this problem. The hope is by involving Mr. Martin in the problem-solving process that he will develop ownership of both the problem and the solution (cooptation; see Pfeffer and Salancik, 1978). Students may note that this is a less confrontational approach and gives credence to Justin Martin's role as mentor and supporter of Davis and Hodgetts.

The exceptional student will note that asking for Justin Martin's help has always lead to hidden negative consequences and worse, takes the control of the situation out of Davis and Hodgetts' hands and places it into a third party stakeholder. This student's preferred method would be to develop a set of alternatives that could be explored with Justin Martin and to have DHR and Mr. Martin reach a consensus on how to proceed. Alternatives could include, but are not limited to, the following:

1. Delaying the closing until Hodgetts' bank account cleared or Davis's check cleared the bank.
2. Going ahead with the closing but having D H R put $50,000 in an escrow account once their TIAA-CREF funds cleared.
3. Mr. Martin forgoing the down payment but obtaining a small equity position in the firm equal to $ 50,000 – Davis and Hodgetts would have an option to buy him out at the end of the project.
4. Rather than funds being placed into an escrow account, one of the inner lots would be held in escrow.

EPILOGUE

Hodgetts and Davis thought that their only recourse was to call Justin Martin and explain the situation to him as succinctly as they could. When they did get a hold of Justin Martin he was quite pleasant but insisted on maintaining the escrow account. They agreed that they would go to closing on July 15th but that DHR would wire transfer $ 50,000 into the escrow account by the 19th, the day Davis's check was supposedly to clear. An enraged Justin Martin called Davis at around 3 PM on the 19th (since the funds had not been transferred to his escrow account) to find out that Davis's check would not clear until the following business day. Hodgetts's bank account was also not going to clear until the 20th. Hodgetts wired the $ 50,000 the first thing in the morning of the 20th, to Justin Martin's satisfaction. Justin Martin's loan was repaid on August 23, 2004 through an upfront all cash home sale to Justin Martin's mother-in-law (the home was discounted by approximately $50,000).

ENDNOTES

1 We would like to thank the reviewers for this suggestion.

2 We would like to thank the reviewers for noting the double taxation issue with C corporations.

3 We would like to thank the reviewers for raising this extremely important question.

4 What would like to thank the reviewers for this observation.

REFERENCES

David, F. R. (2003). Strategic Management Case Writing: Suggestions After 20 Years of Experience *S.A.M. Advanced Management Journal* (Summer) 68, 3, 36-38.

Gallagher, T. J. & J. D. Andrew (2003). *Financial Management: Principles and Practice.* 3rd Edition. Upper Saddle River, N. J.: Prentice Hall.

Gertsel, D. (1998). *The Builder's Guide to Running a Successful Construction Company.* 2nd Edition. Newton, Ct.: The Tauton Press.

Harrison, J. S. & C. H. St. John (2004). *Foundations in Strategic Management.* 3rd Edition.

Keown, A. J., J. D. Martin, J. W. Petty & D. F. Scott, Jr. (2005). *Financial Management: Principles and Applications.* 10th Edition. Upper Saddle River, N. J.: Prentice Hall.

Lambing, P. A. & C. R. Kuehl (2003). *Entrepreneurship.* 3rd Edition. Upper Saddle River, N. J.: Prentice Hall.

Lundberg, C. C., P. Rainsford, J. P. Shay & C.A. Young (2001). Case Writing Reconsidered, *Journal of Management Education* (August) 25, 4, 450-463.

Lynn, L. E. Jr. (1999). *Teaching & Learning with Cases: A Guidebook.* New York: Seven Bridges Press.

Mancuso, Anthony (2004). *Your Limited Liability Company: An Operating Manual.* 3rd Edition. Berkeley, Ca.: Nolo.

Megginson, L. C., M. J. Byrd, & W. L. Megginson (2003). *Small Business Management: An Entrepreneur's Guidebook.* 4th Edition. New York: McGraw-Hill Irwin.

Naumes, W. & M. J. Naumes (1999). *The Art & Craft of Case Writing.* Thousand Oaks, Ca.: Sage Publications.

Nicastro, M. L. & D. C. Jones (1994). *Cooperative Learning Guide for Marketing Teaching Tips for Marketing Instructors*. Englewood Cliffs, N.J.: Prentice-Hall, Inc..

O'Connor, M. (1997). Loan Shark Talks About Grisly Duty *Chicago Tribune* [North Sports Final Edition], April 16, p. 6.

Pearce, J. A. II & R. B. Robinson, Jr. (2005). *Strategic Management*: *Formulation, Implementation, and Control*. 9th Edition. New York: McGraw-Hill Irwin.

Peiser, R. B. & A. Frej (2003). *Professional Real Estate Development* 2nd Edition. Washington, D.C.: Urban Land Institute.

Pfeffer J.& G. R. Salancik (1978). *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.

APPENDIX 1 – CLASS HANDOUT

The Real Estate Development Industry
http://strategis.ic.gc.ca/epic/internet/indsib-fsib.nsf/en/ou00013e.html)

Definition

The real estate development industry is comprised of firms that do any combination of land assembly, development, financing, building and the lease or sale of residential, commercial and industrial property.

Overview

The real estate development industry represents a key component of the economy. A vibrant real estate sector boosts demand for goods and services from the building products industries and other sectors such as construction, consulting engineering, architecture and legal. Local and national economic growth, interest rates and changing demographics play key roles in the industry's future direction. Specialization in commercial markets is occurring beyond office buildings with firms targeting entertainment and health care markets.

The industry consists of a large number of small, niche oriented firms who concentrate on home markets, and a few large companies investing in the U.S. and overseas. Development firms typically have a small number of employees responsible for core operations while design, engineering, architecture, planning, legal and construction services are contracted out.

Infrastructure project developers, who build large projects, may comprise consortiums of large construction companies and engineering firms.

The industry has a wide range of associations representing it including:

- Building Owners and Managers Association;
- Urban Development Institute;
- Society of Industrial and Office Realtors.

The Residential Home Construction Industry

This industry comprises establishments primarily responsible for the entire construction (i.e., new work, additions, alterations, and repairs) of single family residential housing units (e.g., single family detached houses, town houses, or row houses where each housing unit is separated by a ground-to-roof wall and where no housing units are constructed above or below). This industry includes establishments responsible for additions and alterations to mobile homes and on-site assembly of modular and prefabricated houses. Establishments identified as single family construction management firms are also included in this industry. Establishments in this industry may perform work for others or on their own account for sale as speculative or operative builders. Kinds of establishments include single family housing custom builders, general contractors, design builders, engineer-constructors, joint-venture contractors, and turnkey contractors.* (http://www.ibisworld.com/industry/ definition.asp?Industry_ID=169)

The Construction Contracting sector of this market consists of general contractors, who undertake the construction of entire structures, and trade contractors, who perform specialized services such as site preparation, structural work (steel or concrete), mechanical and electrical systems installations, and other interior and exterior work. The latter normally operate as subcontractor to the general contractor. (http://strategis.ic.gc.ca/epic/internet/incc-cc.nsf/en/Home)

APPENDIX 2 – CLASS HANDOUT

Small Business Administration
(Excerpted from http://www.sbaonline.sba.gov/financing/basics/basics.html,
August 23, 2004.)

Financing Basics

While poor management is cited most frequently as the reason businesses fail, inadequate or ill-timed financing is a close second. Whether you're starting a business or expanding one, sufficient ready capital is essential. But it is not enough to simply have sufficient financing; knowledge and planning are required to manage it well. These qualities ensure that entrepreneurs avoid common mistakes like securing the wrong type of financing, miscalculating the amount required, or underestimating the cost of borrowing money.

Before inquiring about financing, ask yourself the following:

1. Do you need more capital or can you manage existing cash flow more effectively?
2. How do you define your need? Do you need money to expand or as a cushion against risk?
3. How urgent is your need? You can obtain the best terms when you anticipate your needs rather than looking for money under pressure.
4. How great are your risks? All businesses carry risks, and the degree of risk will affect cost and available financing alternatives.
5. In what state of development is the business? Needs are most critical during transitional stages.
6. For what purposes will the capital be used? Any lender will require that capital be requested for very specific needs.
7. What is the state of your industry? Depressed, stable, or growth conditions require different approaches to money needs and sources. Businesses that prosper while others are in decline will often receive better funding terms.
8. Is your business seasonal or cyclical? Seasonal needs for financing generally are short term. Loans advanced for cyclical industries such as construction are designed to support a business through depressed periods.
9. How strong is your management team? Management is the most important element assessed by money sources.
10. Perhaps most importantly, how does your need for financing mesh with your business plan? If you don't have a business plan, make writing one your first priority. All capital sources will want to see your for the start-up and growth of your business.

Not All Money Is The Same

There are two types of financing: equity and debt financing. When looking for money, you must consider your company's debt-to-equity ratio - the relation between dollars you've borrowed and dollars you've invested in your business. The more money owners have invested in their business, the easier it is to attract financing.

If your firm has a high ratio of equity to debt, you should probably seek debt financing. However, if your company has a high proportion of debt to equity, experts advise that you should increase your ownership capital (equity investment) for additional funds. That way you won't be over-leveraged to the point of jeopardizing your company's survival.

Equity Financing

Most small or growth-stage businesses use limited equity financing. As with debt financing, additional equity often comes from non-professional investors such as friends, relatives, employees, customers, or industry colleagues. However, the most common source of professional equity funding comes from venture capitalists. These are institutional risk takers and may be groups of wealthy individuals, government-assisted sources, or major financial institutions. Most specialize in one or a few closely related industries. The high-tech industry of California's Silicon Valley is a well-known example of capitalist investing.

Venture capitalists are often seen as deep-pocketed financial gurus looking for start-ups in which to invest their money, but they most often prefer three-to-five-year old companies with the potential to become major regional or national concerns and return higher-than-average profits to their shareholders. Venture capitalists may scrutinize thousands of potential investments annually, but only invest in a handful. The possibility of a public stock offering is critical to venture capitalists. Quality management, a competitive or innovative advantage, and industry growth are also major concerns.

Different venture capitalists have different approaches to management of the business in which they invest. They generally prefer to influence a business passively, but will react when a business does not perform as expected and may insist on changes in management or strategy. Relinquishing some of the decision-making and some of the potential for profits are the main disadvantages of equity financing.

You may contact these investors directly, although they typically make their investments through referrals. The SBA also licenses Small Business Investment Companies (SBICs) and Minority Enterprise Small Business Investment companies (MSBIs), which offer equity financing. Apple Computer, Federal Express and Nike Shoes received financing from SBICs at critical stages of their growth.

Additional Reading

Raising Money through Equity Investments - *Inc. Magazine*

Debt Financing

There are many sources for debt financing: banks, savings and loans, commercial finance companies, and the U.S. Small Business Administration (SBA) are the most common. State and local governments have developed many programs in recent years to encourage the growth of small businesses in recognition of their positive effects on the economy. Family members, friends, and former associates are all potential sources, especially when capital requirements are smaller.

Traditionally, banks have been the major source of small business funding. Their principal role has been as a short-term lender offering demand loans, seasonal lines of credit, and single-purpose loans for machinery and equipment. Banks generally have been reluctant to offer long-term loans to small firms. The SBA guaranteed lending program encourages banks and non-bank lenders to make long-term loans to small firms by reducing their risk and leveraging the funds they have available. The SBA's programs have been an integral part of the success stories of thousands of firms nationally.

In addition to equity considerations, lenders commonly require the borrower's personal guarantees in case of default. This ensures that the borrower has a sufficient personal interest at stake to give paramount attention to the business. For most borrowers this is a burden, but also a necessity.

APPENDIX 3 – BASIC CONSTRUCTION LOAN DRAW SCHEDULE AND FORMULA*

Following is the basic formula used in calculating construction loan progress draws:

*1. LAND ADVANCE = up to 50% (**gross) of the current value of the property, or the purchase price when purchased within last 6 months, whichever is less. (*rule of thumb: More expensive and/or larger parcels impose a lower land advance percentage due to "land to improvements" ratio.* This draw is released at close of loan escrow. The loan fees, escrow fees, title insurance, etc. are taken out of this land advance, up front, at close of loan escrow.

* arrangements can be made for payment of 1/2 of your permits and school fees here

*2. FOUNDATION DRAW = Average usually approximately $10,000.00 to $50,000.00 unless the foundation is engineered or above average in cost in which case this figure might be adjusted. This draw released when the foundation is poured and stripped and all permits paid for and obtained.

*****you can add a sub floor and/or top plate draw here

3. ROOF SHEETING = Approximately 40% of the balance of funds after deducting amount of draws 1, 2, and 5. This draw is released upon completion of roof sheeting nailing.

4. SHEETROCK = Approximately 60% of the balance of funds after deducting amount of draws 1, 2, and 5. Draw released upon completion of sheetrock nailing.

*5. FINAL = 20% of the principal amount of the loan plus accrued interest. This draw released when home is complete, finished and turn key. Half this draw can be set up to be released upon for example "all doors, paint, cabinets etc".

Occasionally a borrower will request more than 5 draws. Additional draws can be created between some of these 5 basic draws and debit the amount of an additional draw created from the succeeding or next in line draw. There's usually a small fee charged for each additional draw created of approximately $100 to $150 each, depending in part on how far an inspector must travel for inspections.

***** There is little, if any, room for negotiation in draws marked with an asterisk (*); additional draws probably could not be inserted between draws 1 and 2 (COE and foundation). i.e. Additional draws are possible after draw #2 (foundation), #3 (roof sheeting) and #4 (sheetrock) from draws #3, #4 and #5. For example, one might wish to have a draw created between roof sheeting and sheetrock at "O.K. to cover" or when insulation is in.

****** The loan fee, escrow fee, title insurance, etc. come off the top of the loan, they are taken from the land advance, up front, at close of loan escrow.

* Excerpted and modified. http://www.easyconstructionloans.com/loan_documents_basic_5_draw_schedule.htm, January 18, 2005.

DAVID WALENTAS' TWO TREES MANAGEMENT COMPANY: A CASE OF DELIBERATE ENTREPRENEURSHIP

Noushi Rahman, Pace University
Fabiha Naumi, Katalyst, Bangladesh

CASE DESCRIPTION

This is an entrepreneurship case in the real estate industry (in a New York neighborhood called DUMBO).

DUMBO is one of the most chic neighborhoods of New York City, specifically Brooklyn, and the revitalization has been a "planned gentrification" as opposed to a "natural gentrification" process. This case primarily focuses on (a) entrepreneurial traits and behaviors in the context of real estate development and (b) relevant corporate strategies—horizontal and vertical integration—for the entrepreneurial firm. The secondary focus is on the resource based view. This is a complex case and it requires some prior understanding of strategy concepts. It will be appropriate as a business policy case for senior undergraduate as well as graduate students. Also, it may be used exclusively as an entrepreneurship case with junior and senior undergraduate students. Considering the length of the case, it needs to be pre-assigned; students must have read the case before coming to the class. Questions about the case should also be pre-assigned to point students' thinking in the desired direction. Actual analytical discussion should take roughly 10 minutes per question discussed, and another 5 to 10 minutes would be enough to provide a case summary in class.

CASE SYNOPSIS

Real estate entrepreneur-turned-mogul David Walentas has deliberately transformed Brooklyn's DUMBO neighborhood, where he holds about 3 million square feet of building space. Walentas has worked methodically to give the deserted area of DUMBO a neighborhood feel. Initially, he allowed artists to move in for very low rent. As artists moved in, so did culture, sophistication, and the need for art-related things. This gave rise to multiple galleries, design studios, and printing services firms in DUMBO. With an increasing population in the neighborhood, the government was more willing to invest in redeveloping State-owned properties in the area. This had strong positive spill over for Walentas' Two Trees Management Company.

At an estimated current going price of $700 per square foot, Walentas' 3 million square feet real estate holdings are worth about $2.1 billion. With development work in DUMBO factory buildings going full-steam, however, Walentas now faces a dilemma concerning his growth strategy. Once these buildings are all leased out or sold, the growth of his company Two Trees Management will stagnate. Thus, despite tremendous success, what the future holds for Two Trees is anyone's guess.

INSTRUCTORS' NOTES

Case Abstract

Real estate entrepreneur-turned-moghul David Walentas has deliberately transformed Brooklyn's DUMBO neighborhood, where he holds about 3 million square feet of building space. Walentas' Two Trees Management Company has added value to the properties in both traditional and novel ways. Traditionally, Two Trees has added value by making infrastructural changes. For example, converting factory buildings to luxury loft apartments has added much value to the buildings. Constructing grand lobbies, modern appliances, concealed wiring, convenient electrical outlets, decorative hallways, wide windows—all these infrastructural changes have added value to Two Trees' properties. However, the value generated from these infrastructural changes assumes a reasonable quality of life in the neighborhood that DUMBO did not have previously. Walentas has worked deliberately to give DUMBO a neighborhood feel. Initially, he allowed artists to move in for very low rent. As artists moved, so did culture, sophistication, and a need for art-related things. This gave rise to multiple galleries, design studios, and printing services firms in the neighborhood. With an increasing population in the neighborhood, both City and State governments were more willing to invest in redevelopment projects. From rerouting Bus 25 through DUMBO, to substantial improvements in the neighborhood park, to establishing a boardwalk by the East River, the governments' interest and help had strong positive spillover for Two Trees Management.

In the late 1990s, with a rejuvenating neighborhood, an established cultural flare, and a rising NYC real estate market, Two Trees Management finally started selling and leasing its value-added apartments in DUMBO. All units of the first building were sold for a total of $70 million within months. All units of the second condo-converted building also were sold within months in 2003. At the current going rate of about $700 per square foot, Walentas' 3 million square feet of building space in DUMBO is worth about $2.1 billion.

With development work in DUMBO factory buildings going on in full-steam, Walentas now faces a dilemma concerning his growth strategy. His DUMBO resources, which made him a real estate moghul were unique and he had accessed them early on. Once these buildings are all leased out or sold, the growth of his company Two Trees Management will stagnate. Anticipating this impending slowdown, Walentas has been trying hard to construct new high-rise buildings in

DUMBO. However, political opposition has made such vertical expansion remote. Growing in other neighborhoods in a manner similar to DUMBO remains another alternative for Walentas' Two Trees. Besides growth through real estate development, Two Trees Management may consider moving in other supporting and related industries. For example, household appliance, grocery, etc. can contribute to the neighborhood feel. However, Two Trees Management has no experience operating such businesses. What path Walentas pursues to achieve growth remains to be seen.

Teaching Objectives

1. Entrepreneurship
    a. Traits
    b. Behavior
    c. Planning and Deliberation
2. Opportunities from external environment coupled with internal strength
3. Corporate strategy for future growth: Horizontal Integration vs. Vertical Integration and Related Diversification
4. Resource-based view of Walentas' assets

Courses

This is a complex case and it requires some prior understanding of strategy concepts. It will be appropriate for senior undergraduate as well as graduate students.

Undergraduate:

1. Business Policy and Strategy course
2. Entrepreneurship courses

Graduate:

1. Strategy courses
2. Entrepreneurship courses

Class Room Discussion Questions

1. What entrepreneurial traits do you observe in Walentas? How do these contribute to his success?
2. In what ways did Walentas add value to his properties?

3. To pursue further growth, speculate which strategy Two Trees should pursue. Justify your answer in terms of Two Trees' resources and capabilities.
4. Walentas' holdings of 3 million square feet of building space in DUMBO have been his main source of competitive advantage. Can Walentas sustain this competitive advantage? Justify your answer in light of the resource-based view.

Teaching Suggestions

1. This case needs to be pre-assigned; students must have read this case before coming to the class
2. Questions about the case should also be pre-assigned to point students' thinking in the desired direction
3. Actual analytical discussion should take roughly 10 minutes per question discussed (plus another 5 to 10 minutes of case summary in class)

Supplemental Video (available for sale at $11.95 from www.bobvila.com)

Vila, B.(2002). Demolition and Preservation in Brooklyn. *Waterfront Warehouse Rehab – Episode 2 (Show 1402)*. From: Bob Vila's Products and Services <http://web1.bobvila.com/BVTV/HomeAgain/Episode-1402.html>.

In this video, as excerpted from www.bobvila.com, "Chris Vila joins Bob again to tour a loft space in the neighboring Sweeney Building. In addition to stunning views of the Brooklyn Bridge and downtown Manhattan, the building boasts a "tar beach" rooftop deck space. Bob and Chris are joined by David and Jed Walentas, the owners of the project building, who share with us their vision for the area. Back on site, demolition is underway and Bob meets Bill Higgins from Higgins and Quasebarth preservation experts to find out more about the history of the building."

Sample Student Answers for the Questions in DUMBO Case

1. What entrepreneurial traits do you observe in Walentas? How do these contribute to his success?

"A" response

By being proactive, innovative, and risk-taking, David Walentas shows all three generic traits of entrepreneurship. Soon after he bought roughly 2.5 million square feet of space in Fulton Ferry Landing, he renamed the place to call it DUMBO (abbreviation of down under the Manhattan bridge overpass). This was very inventive! So were offering the

four-step leasing plan to businesses, allowing specific types of businesses (i.e., those adding to his envisioned cultural flare) to move in, and bringing renowned restaurants to DUMBO.

Second, he wanted the City government to give him the contract to work on the Fulton Ferry Park. When the government put up a tender, he was the first and only bidder. This shows his proactive attitude. The whole process of gearing "gentrification" in a "focused and quick" manner to revitalize the dilapidated neighborhood into a chic one was a unique case in gentrification history; and without Walentas' proactive attitude, this could not have happened. Specifically, arranging different festivals (e.g., 'It's my park' day) to create a neighborhood feel was a proactive step by Walentas.

Lastly, when people were scared to even go to DUMBO, he was risk-taking enough to buy 2.5 million square feet of space in 9 deserted buildings! Even under extreme financial pressure, he sent his son to the University of Pennsylvania and had him apprenticed under Donald Trump. The University of Pennsylvania was a risky choice for Walentas at that time and situation; but Walentas went ahead and made sure that his management team was getting the best training.

"B" response

Walentas shows all three entrepreneurial traits. For example, providing the four-step leasing plan to business tenants shows that he is inventive (because it is not a very common thing to offer). Walentas is proactive as well; we understand it from the fact that he organized several art-related festivals to create a neighborhood feel in DUMBO. As the developer, he just did not renovate the old buildings; he thought more and proactively arranged these festivals to make his tenants happier. Initially, buying 2.5 million sq feet of building space in nine deserted buildings was risky enough. The problem with deserted neighborhoods is that nobody wants to go there. But Walentas took the risk and bought those buildings with $16.5 million.

"C" response

Walentas is innovative and risk-taking. So he has two out of three entrepreneurial traits. He is innovative because he started new things that one wouldn't normally expect. For example, the four-step leasing plan and bringing in the higher end restaurants are innovative tasks that he did. He is risk-taking because he invested millions of dollars to buy a lot of space in an abandoned sort of a place. If his planned neighborhood revitalization hadn't occurred, he'd be doomed.

2. In what different ways did Walentas add value to his properties?

"A" response

Walentas added value to his properties in both traditional and novel ways. While renovating dilapidated buildings with large windows and new fittings is a traditionally value-adding task, most of Walentas' initiatives and works added value to his properties in unconventional ways.

His concept of changing old factory buildings into posh offices and upper-middleclass residential apartments is rather unique; after all, we do not normally expect to find these in 'once abandoned' factories. Instead of relying on a slow gentrification process and counting on others' contributions, Walentas purchased a lot of building space in the area and became the deliberate catalyst for triggering his envisioned neighborhood revival of DUMBO. On one hand, he offered the four step leasing opportunity (visit space, sign lease, move in, and get to work) to his business tenants; this all-inclusive deal (where all amenities came with the package) was hard to refuse. On the other hand, he also did a lot of things to give DUMBO a neighborhood feel for his residential tenants – from creating art festivals to bringing in Zagat-rated restaurants, to choosing the neighborhood bakery – Walentas did it all to make DUMBO a better place. The cultural character and upper-middleclass aura of DUMBO (i.e., the neighborhood upheaval in general), in turn, made his properties more valuable and easier to market.

"B" response

Walentas offered a 'ready to work' environment to his business tenants. He practically handpicked those tenants, making sure that they added to the cultural character of gentrifying DUMBO. In choosing these tenants, he could also create an interdependent business community in the neighborhood. Also, the large windows and good fittings added value to his properties. He also brought in many expensive and well-known restaurants, which also made the neighborhood more attractive.

"C" response

Walentas' apartments (that he rented out to businesses) already had electric, phone, and cable wires. It is not ordinary practice as it makes life more convenient for the tenants. Tax break also attracted businesses. He also tried to give DUMBO an artsy feel; and he also brought in many restaurants for fine dining.

3. To pursue further growth, speculate which strategy Two Trees should pursue. Justify your answers in terms of Two Trees' resources and capabilities.

"A" response

Walentas should expand his real estate business through horizontal integration strategy. Red Hook, Brooklyn seems like a perfect target for him next. As far as his buildings in DUMBO are concerned, he should decide his plan of action rationally. If he has at least ten buildings in hand, he should rent out three buildings to take advantage of the ongoing increases in the rental market prices. He needs to focus on quality in the future; so, generating profits currently will help him to provide continuous maintenance on each building (of course, condo fees are usually designed to cover basic maintenance anyway).

As made evident in the article, "ushering in premium quality businesses" would most definitely "increase the value of the neighborhood." Therefore, Walentas could afford to sell at least two of his buildings to gain a set amount of money to payoff any existing mortgages. While he rents three, sells two, he can begin renovations to the other buildings at a pace that is convenient to him, especially in terms of completing the renovations when the market is hot.

Walentas has been successful because he has always acted rationally and competitively; so, making totally rash decisions and occupying all ten sites would not be as much of an advantage. Walentas should stick with real estate because, in addition to the leadership, he also has other resources, i.e., his four-step plan and a skilled and supportive management team. Now, having worked miracles in DUMBO, the management team is even more experienced, and thus is likely to be successful again.

"B" response

Walentas should use horizontal integration as a corporate strategy. Real estate is his area of expertise and he should stick to real estate for now. Two Trees should consider merging or partnering with other developers in DUMBO. This would give Two Trees greater control over the real estate properties in the neighborhood, which will continue to become more attractive every year. On a related point, while Walentas is enjoying the hot real estate market (like any other developer), he should make sure that he reaps his profits before the real estate market turns sour.

"C" response

Walentas' resource is his large ownership of real estate in DUMBO. And due to his reputation and DUMBO's new culture, he has the capability to build theater, art galleries and art trading centers. So he should diversify into the entertainment business now.

4. Walentas' holdings of 3 million square feet of building space in DUMBO have been his main source of competitive advantage. Can Walentas sustain this competitive advantage? Justify your answer in light of the resource-based view.

"A" response

In order to determine whether Walentas can sustain his competitive advantage, it is crucial to analyze the situation from all four angles – value, rareness, inimitability, and non-substitutability. First, his traditional and novel ways of value adding transformed the dilapidated neighborhood of DUMBO into a vibrant area, which is more cultured, feasible and attractive now. From $6 per square foot to an average of $700 per square foot numerically corroborates the value he added. Second, DUMBO is rare because there are very few waterfront neighborhoods in New York City proper. So even if somebody else wants to repeat Walentas' work in DUMBO in some other place, chances are slim to none that s/he would find a similar geographic setting (with a similarly unique view). Third, Walentas wins even where inimitability is concerned. Walentas had a vision of converting these factory buildings into posh offices and residential apartments to certain specifications; and that is exactly what he did. The cultural identity and the trading nature of the neighborhood that he created is one of a kind. So is his care in selecting his tenants. So DUMBO is inimitable. Lastly, there seems to be no substitute for Walentas' DUMBO project, since competitors would have to incur very high switching costs (i.e., large-scale real estate is a very capital intensive business). Also, he provides an all-inclusive packaged deal to tenants, so any building trying to compete with these perks would most likely lose. Walentas successfully created a project that has a positive outlook for the future from the perspective of his profits and from that of the people who live in the community. Thus, with the kind of resources that Walentas has, he can sustain his competitive advantage.

"B" response

Walentas' company has the ability to maintain its competitive advantage because it has four criteria necessary for that. Its capabilities are valuable, in that it has been successful in creating its vision by using incredible insight and innovation. It is rare because

of the services offered to the tenants before they move in, such as internet, and phone connections. The DUMBO neighborhood enjoys inimitability because of the way it is setup. There are great quality buildings with a park nearby. Walentas' DUMBO project is also difficult to imitate because it has many tax breaks provided by the local government. Finally, the strategic capabilities are non-substitutable because the development strategy involves a large investment of a huge underdeveloped area and a long-term goal.

"C" response

I believe Walentas can sustain his competitive advantage. His property has added great value over the years, mainly cultural value. He wanted an area where work and entertainment could happen together. Over the years, the area has become an exciting place with different cultures and many different things to do. DUMBO has many rare qualities like the geographic uniqueness as well as Walentas' treatment with his tenants. I believe that Walentas will come up with new innovations to maintain the rareness of his property.

PEARL BEER

Henry ("Rod") Elrod, University of the Incarnate Word

CASE DESCRIPTION

Pearl Beer is purposefully written in an easy-going style intended to appeal to students, and is designed to stimulate classroom discussion. The case can be used in and management policy strategy classes or marketing classes. There is no intention to cast odious reflections on particular people or companies, Coors Beer and Pearl Beer included, nor to suggest a better way of management. The things Wayne says are just his opinions, and no one knows if they are true or not.

Students should prepare an analysis of what is going wrong at the company, and what they are going to do about it. The case does not include data for the students to analyze because the problems in the case, and their solutions, have their genesis in behavioral issues which are not affected by the application of statistical approaches or by the tools of managerial accounting. The case presents no technical difficulty, but requires the logical thought and clarity of expression typical of seniors and graduate students. It can be taught in a single class if the students prepare ahead of time, and students should spend perhaps an hour in a discussion group to prepare.

SYNOPSIS

Pearl Beer describes Wayne, a delivery truck driver for a beer distributor, as its central character. The company calls Wayne an outside salesperson. Wayne calls himself a truck driver. This dichotomy is the central theme of the case, which should be approached as an exercise in organizational behavior and employee motivation. Through Wayne's experiences students get an inside look at the organization and operation of the company, and a first hand view of the problems faced by management.

The manager, Jan Williamson, has a big problem. Relentless competition and the day-to-day battle for the minds of the company's employees are paramount. How can she capture the imagination of her employees and gain their spirited contribution to the efficient marketing of the company's products? How can she compete, and yet retain her integrity? How can we be competitive, and yet hold up our end of the bargain a company has with its employees and society? These are the questions raised by the case.

Pearl Beer reflects the reality that in business one never has enough time, resources or information upon which sound decisions may be based. Yet, management must analyze, develop plans and strategies and act. Students should prepare an analysis of what is wrong at the company, and develop a plan for what to do about it.

INSTRUCTORS' NOTES

Management

Forced field analysis, as described by Besterfield (Besterfield, Besterfield-Michna, Besterfield, & Besterfield-Sacre, 2003) may help students understand the forces involved in the company's marketing and management problems. Given an objective to increase sales, students may identify management's desires and emphasis on marketing as promoting attainment of the objectives. The low pay provided to the drivers, the perception that increases in the routes will be taken from the current route drivers, limitations on the number of stops a single truck can make in a day, prior adversarial relations between management and the drivers, and lack of sales and marketing training for the drivers may be listed as forces inhibiting the attainment of management's objectives.

The company is organized to deliver beer, but not to market it. Changes that management may contemplate to address this issue might include organizing the routes so that drivers can become supervisors of multiple routes, giving them the organizational room and the time in the workday to pursue new accounts and manage expanded route responsibilities.

The structure of the routes and the pay system is central to the company's failure to market effectively using the route drivers as the primary sales force. Does the route delivery system and commission pay system provide incentive for the drivers to perform as better sales agents, or does it simply give management an excuse to keep wages low, by containing wages as a percentage of sales? The company may consider putting one driver in charge of two or three adjacent routes, with an override commission. This would provide the additional sales structure and incentive pay needed to emphasize the importance of signing new accounts.

Should the Pearl Brewing Company, located in San Antonio, Texas, provide this Fort Worth distributor with assistance, advertising money and expertise? Should the local company conduct advertising? What about store displays and specials in cooperation with the local grocery chains?

Students should consider the effects on job performance of the management attitudes and style implicit in this organization. Management's underlying assumptions about how people behave are important influences in their planning and thinking, and send important messages to employees (McGregor, 1960). What messages about job performance and personal advancement has Wayne been getting? Are his goals aligned with company goals?

Students should consider questions like "what business are we in?", and "what businesses should we be in?" (Drucker, 1954) Force-field analysis or SWOT analysis may be helpful (Besterfield et al., 2003). The company's strict definition of the Pearl distributor in Fort Worth as a beer distributor was to restrictive to allow the company to consider handling other products which their vehicles, sales/delivery personnel and route structure could accommodate, which may have helped sales and profitability. Expanding their vision to include "liquid refreshments" may have

helped. If their vision of the company had included "packaged food and beverage distributor" it would have allowed them to deliver non-alcoholic beverages, snacks and other convenience food items to their basic customer base, without much change in methods or equipment.

Although their contractual arrangements with Pearl Brewing may have restricted this flexibility, management should also consider purchasing or contracting for distribution of other brands of beer. Pearl was marketed as a popular beer as opposed to a premium beer. These classifications refer to the retail price of the products, but have no effect on the cost of the products. Thus, if Pearl Distributing could deliver a premium beer as well as the popular-priced Pearl, gross profit margins may be improved.

Pearl Brewing Company (the San Antonio brewer) did not engage in this kind of analysis, and likely, their distributors did not either. Although some Pearl is still made, the main Pearl brewery in San Antonio, the oldest in Texas and established in 1881 (Hennech, 2002), has been closed for several years. Coors, Anheuser-Busch and Miller Brewing dominate the Texas market today.

Ethics

There are also some important ethics issues embedded that students should discuss. In their career selection process, students should consider whether they should participate in an industry whose products are regularly blamed, albeit when not "used responsibly," for significant levels of death and destruction in our society. Students should consider alcoholism, alcohol related traffic deaths, and whether they should make their living in an industry that profits from the misery of others. The drivers (at least the ones in this case) regularly drink beer during the workday, and then get back into the 25 thousand pound vehicle to fight the traffic to the next delivery.

There are also ethical and legal issues that should be considered beyond simply paying fair wages for hard work. What becomes of the employees who are injured or disabled on the job? What becomes of employees who are too old to continue in the job? What will they do without a pension plan or 401K? This company offered nothing to their employees other than wages and group health insurance.

EPILOGUE

Jan Williamson, the manager of Pearl Beer Distributing Company, was fired about three months after the facts in this case were developed, when the annual sales figure once again dropped.

REFERENCES

Besterfield, D., Besterfield-Michna, C., Besterfield, G., & Besterfield-Sacre, M. (2003). *Total Quality Management (3rd ed.)*. Upper Saddle River, New Jersey: Pearson Education, Inc.

Drucker, P. (1954). *The Practice of Management.* New York: Harper & Row.

Hennech, M. (2002). Pearl Brewing Company [Electronic Version]. *Handbook of Texas Online* Retrieved October 15, 2006 from http://www.tsha.utexas.edu/handbook/ online/articles/ PP/dipgx.html.

McGregor, D. (1960). *The Human Side of Enterprise*. New York: McGraw-Hill Book Company, Inc.

HEDGING FOREIGN CURRENCY TRANSACTION EXPOSURE

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CASE DESCRIPTION

The primary subject matter of this case is hedging foreign currency exchange rate risk. Secondary issues examined include assessing transaction exposure and comparing hedging techniques to effectively manage unwanted exposure. The case requires students to have an introductory knowledge of accounting, statistics, finance and international business thus the case has a difficulty level of four (senior level) or higher. The case is designed to be taught in one class session of approximately 3 hours and is expected to require 3-4 hours of preparation time from the students.

CASE SYNOPSIS

St. Louis Chemical is a regional chemical distributor, headquartered in St. Louis. Don Williams, the President and primary owner, began St. Louis Chemical ten years ago after a successful career in chemical sales and marketing. The company has gradually expanded it product line and network of manufactures. However, a year-end report had shown shrinking profit margins on product lines that include chemicals purchased from a Canadian manufacturer. Williams has asked for recommendations regarding his firm's exposure to exchange rate risk.

INSTRUCTORS' NOTES

CASE OVERVIEW

St. Louis Chemical is a regional chemical distributor, headquartered in St. Louis. Don Williams, the President and primary owner, began St. Louis Chemical ten years ago after a successful career in chemical sales and marketing. During a year-end review, Williams noticed a significant deterioration in the profit margins of many specialty chemical lines. After further investigation, Williams learned their supplier, Norcand Chemical, required all orders to be invoiced in Canadian dollars. As a result of the invoicing policy, St. Louis Chemical was exposed to an average of 90 days of exchange rate transaction exposure. Williams solicited the help of James

Thorton, a newly hired assistant in the finance office, in proposing alternatives to manage the exchange rate risk.

The primary subject matter of this case is foreign currency exchange rate risk. Secondary issues examined include assessing transaction exposure and comparing hedging techniques to effectively manage exposure. The case requires students to have an introductory knowledge of accounting, statistics, finance and international business, thus the case has a difficulty level of four (senior level) or higher. The case is designed to be taught in one class session of approximately 3 hours and is expected to require 4-5 hours of preparation time from the students.

TASKS TO BE PERFORMED

1. Calculate the percentage change in the #CAD/1USD exchange rate between the order month and invoice month for past transactions. Determine the US dollar cost difference per transaction between the estimate used by Packmore and the invoice paid by Scott. Explain the effect of exchange rate movements on profit margins during 2005.

Order Month	Spot Rate used by Young at time of order #CAD/1USD	Payment Month	Spot Rate Used by Scott to Pay Invoice #CAD/1USD	% Change in Value of USD
Jan-04	1.33	Apr-04	1.37	3.01%
Feb-04	1.34	May-04	1.36	1.49%
Mar-04	1.31	Jun-04	1.35	3.05%
Apr-04	1.37	Jul-04	1.33	-2.92%
May-04	1.36	Aug-04	1.32	-2.94%
Jun-04	1.35	Sep-04	1.27	-5.93%
Jul-04	1.33	Oct-04	1.22	-8.27%
Aug-04	1.32	Nov-04	1.19	-9.85%
Sep-04	1.27	Dec-04	1.2	-5.51%
Oct-04	1.22	Jan-05	1.24	1.64%
Nov-04	1.19	Feb-05	1.24	4.20%
Dec-04	1.2	Mar-05	1.22	1.67%
Jan-05	1.24	Apr-05	1.26	1.61%
Feb-05	1.24	May-05	1.26	1.61%
Mar-05	1.22	Jun-05	1.23	0.82%

Order Month	Spot Rate used by Young at time of order #CAD/1USD	Payment Month	Spot Rate Used by Scott to Pay Invoice #CAD/1USD	% Change in Value of USD
Apr-05	1.26	Jul-05	1.22	-3.17%
May-05	1.26	Aug-05	1.19	-5.56%
Jun-05	1.23	Sep-05	1.17	-4.88%
Jul-05	1.22	Oct-05	1.18	-3.28%
Aug-05	1.19	Nov-05	1.17	-1.68%
Sep-05	1.17	Dec-05	1.17	0.00%
Oct-05	1.18	Jan-06	?	
Nov-05	1.17	Feb-06	?	
Dec-05	1.17	Mar-06	?	

Purchase Amount (Thous) CAD	Order Month	Packmore's Cost Estimate (Thous) USD	Payment Month	Invoice Cost (Thous) USD	Cost Difference (Thous) USD
110.25	Jan-04	$ 82.89	Apr-04	$ 80.47	$ (2.42)
85.16	Feb-04	$ 63.55	May-04	$ 62.62	$ (0.93)
65.33	Mar-04	$ 49.87	Jun-04	$ 48.39	$ (1.48)
90.23	Apr-04	$ 65.86	Jul-04	$ 67.84	$ 1.98
42.21	May-04	$ 31.04	Aug-04	$ 31.98	$ 0.94
75.12	Jun-04	$ 55.64	Sep-04	$ 59.15	$ 3.51
41.34	Jul-04	$ 31.08	Oct-04	$ 33.89	$ 2.81
45.08	Aug-04	$ 34.15	Nov-04	$ 37.88	$ 3.73
85.14	Sep-04	$ 67.04	Dec-04	$ 70.95	$ 3.91
159.34	Oct-04	$ 130.61	Jan-05	$ 128.50	$ (2.11)
155.26	Nov-04	$ 130.47	Feb-05	$ 125.21	$ (5.26)
175.19	Dec-04	$ 145.99	Mar-05	$ 143.60	$ (2.39)
265.23	Jan-05	$ 213.90	Apr-05	$ 210.50	$ (3.40)
272.05	Feb-05	$ 219.40	May-05	$ 215.91	$ (3.49)
241.14	Mar-05	$ 197.66	Jun-05	$ 196.05	$ (1.61)

Purchase Amount (Thous) CAD	Order Month	Packmore's Cost Estimate (Thous) USD	Payment Month	Invoice Cost (Thous) USD	Cost Difference (Thous) USD
256.32	Apr-05	$ 203.43	Jul-05	$ 210.10	$ 6.67
283.45	May-05	$ 224.96	Aug-05	$ 238.19	$ 13.23
325.15	Jun-05	$ 264.35	Sep-05	$ 277.91	$ 13.56
310.34	Jul-05	$ 254.38	Oct-05	$ 263.00	$ 8.62
300.21	Aug-05	$ 252.28	Nov-05	$ 256.59	$ 4.31
295.14	Sep-05	$ 252.26	Dec-05	$ 252.26	$ 0.00
286.11	Oct-05	$ 242.47	Jan-06		
315.21	Nov-05	$ 269.41	Feb-06		
300	Dec-05	$ 256.41	Mar-06		

During the first 6 months of 2005, the exchange rate risk had benefited St. Louis Chemical. A modest strengthening of the US dollar that had occurred for orders placed from October 2004 to March 2005 but paid for from January to June 2005 meant that St. Louis Chemical had actually paid a total of $18,260 less for Norcand orders compared to costs Young entered at the time of the orders. Unfortunately, the last 6 months of 2005 had provided a much different outcome. Orders placed from April to September of 2005 and paid for from July to December 2005 had resulted in actual payments of $46,390 more than costs entered in by Young. The US dollar cost difference is a function of the percentage change in the value of the dollar and the size of the order placed. Looking at all of 2005, St. Louis Chemical had actually paid $28,130 more for Norcand orders compared to cost estimates used by Packmore, thus reducing the already thin profit margins characteristic of the industry.

2. For the C$300,000 December 2005 order, determine a probability distribution of the US$ cost to St. Louis Chemical in March, 2006 incorporating the following assumptions:

-The percentage change in the Canadian dollar/US dollar (indirect quote) exchange rate follows a normal distribution.

-The expected percentage change between the spot rate in 90 days and the current spot rate is 0%, but the 90-day standard deviation in the percentage change between the spot rate in 90 days and the current spot rate is equal to 4%.

In the case of the December 2005 order valued at 300,000 Canadian dollars, the spot rate between the Canadian dollar and the US dollar at the time of the order is 1.17CAD / 1USD. If the expected percentage change in the spot rate in 90 days has a mean of 0% then the spot rate is 90 days is expected to be 1.17CAD / 1USD. Therefore, the expected payment in 90 days is equal to (300,000 / 1.17) $256,410. However, if the percentage change in the exchange rate has a standard deviation of 4%, then the probability distribution of the spot rate in 90 days and the corresponding range of payments in March 2006 would be as follows:

CAD/USD Probability distribution for spot rate in 90 days					
	-2 Stdev	-1 Stdev	Expected	+1 Stdev	+2 Stdev
% Change	-0.08	-0.04	0.0	+0.04	+0.08
CAD/USD	<=1.08	<=1.12	1.17	>=1.22	>=1.27
Probability	0.025	0.16	0.16	0.025	
US$ Cost (thousands)	$277.78	$267.86	$256.41	$245.90	$236.22

There is a 68% probability the CAD/USD exchange rate in 90 days will be between 1.12CAD/1USD and 1.22CAD/1USD corresponding to a March 2006 payment in US dollars of between $267.86 and $245.90 thousand. There is a 95% probability that CAD/USD exchange rate in 90 days will be between 1.08CAD/1USD and 1.27CAD/1USD corresponding to a March 2006 payment in US dollars of between $277.78 and $236.22 thousand. Assuming a normal probability distribution with an expected percentage change of 0% for the spot rate in 90 days implies that St. Louis Chemical is equally as likely to pay less than what was expected as they are to pay more than what was expected. Williams decision as to whether the additional currency risk is acceptable will depend on William's degree of risk aversion. If the additional currency risk is not acceptable to Williams, the risk must be transferred to a third party via a hedge position.

3. Discuss with Williams the extent of exchange rate risk faced by St. Louis Chemical arising from the C$300,000 Dec. 2005 transaction using a 90-day Value-at-Risk methodology based on a 95% confidence level.

-The December 2005 spot rate (indirect quote) at the time of the order is 1.17CAD / 1USD.

-The Dec. 2005 order is expected to cost US$256,410 in 90 days.

-A Value-at-Risk methodology incorporates the time horizon, confidence level and transaction size to determine a maximum loss on the value of the position at risk.
-The maximum loss is determined by the lower boundary of the probability distribution, which is approximately 1.65 standard deviations away from the mean for a 95% confidence level.
-The percentage change in the Canadian dollar/US dollar (indirect quote) exchange rate is assumed to follow a normal distribution.
-The expected percentage change between the spot rate in 90 days and the current spot rate is assumed to be 0%, but the 90-day standard deviation in the percentage change between the spot rate in 90 days and the current spot rate is assumed to be equal to 4%.

To determine the extent of the downside risk faced by St. Louis Chemical using a Value-at-Risk methodology, the transaction size, time horizon, and confidence level must be given. In the case of the Dec. 2005 order, the transaction size is C$300,000, the time horizon is 90 days, and the confidence level is given as 95%. The expected payment in 90 days converted to US dollars is $256,410. However, any variation in the exchange rate over the next 90 days gives rise to the exchange rate risk faced by St. Louis Chemical. The Value-at-Risk methodology attempts to provide a single number summarizing the total risk exposure for a particular transaction. If the percentage change in the exchange rate is assumed to be normally distributed, the 95% confidence level for a 90-day maximum loss is determined by the lower boundary of the probability distribution approximately 1.65 standard deviations away from the expected percentage change in the exchange rate. This implies a -0.066 change in the exchange rate (0.0 + 1.65*-0.04 = -0.066). Since the expected spot rate in 90 days is 1.17CAD / 1USD, a -0.066 change in the expected spot rate in 90 days would result in an exchange rate equal to 1.09CAD / 1USD: 1.09 = [1.17*(1+-0.066)]. Based on a 95% confidence level, the maximum price for the C$300,000 Dec. 2005 order would be US$275,229. This implies a 90 day 95% Value-at-Risk equal to US$18,819 (US$275,229-US$256,410).

4. Discuss the strengths and weaknesses of paying Norand at the time of delivery rather than waiting 60 days until the invoice is due.

An advantage of paying Norand at the time of delivery is a reduction in the exchange rate transaction exposure from 90 days to 30 days. However, many disadvantages arise including a lengthening of the cash cycle due to an elimination of the accounts payable period, an increase in net working capital requirements, and an increase in the effective cost

of the order. In order for early payment to be beneficial, St. Louis Chemical would have to negotiate a sufficient cash discount to compensate for the loss of 60 days free credit. However, this would only reduce the magnitude of the transaction exposure, not eliminate it entirely. St. Louis Chemical would still be exposed to 30 days of exchange rate risk, the average length of time required by Norcand to deliver the order.

5. Describe a money market hedge that could be used to eliminate the exchange rate risk associated with the Dec. 2005 order valued at C$300,000 incorporating the following assumptions.

-The Dec. 2005 spot rate is 1.17CAD / 1USD.

-According to St. Louis Chemical's banker, the company can currently borrow US dollars for 3-months at an annual rate of 7.25%, but would only earn an annual rate of 2% on a 3-month Canadian dollar time deposit for transactions below $1 million.

A money market hedge is generally an arrangement with the bank requiring St. Louis Chemical to buy the present value of C$300,000 today in the spot market and place it in a Canadian dollar time deposit or some other Canadian dollar asset until it is needed for payment. The purchase of Canadian dollars today would be financed in US dollars by a short-term loan or by using cash reserves if they were available. The cost of this hedge would be the difference between the interest paid on the US dollar loan and that received from the Canadian dollar deposit. If cash reserves are used, an opportunity cost of funds must be estimated. Using the assumptions given, St. Louis Chemical would need to purchase C$298,507 in the spot market at the time of Dec. 2005 order:

$$C\$300,000/[1 + (0.02/4)] = C\$298,507.$$

If cash reserves are not available, a short term loan of $255,134 would be required at the time of the December 2005 order:

$$C\$298,507/1.17 = \$255,134.$$

At the time of the invoice payment 3 months later, C$300,000 would be available for payment to Norcand and St. Louis Chemical would then repay $259,758 for the dollar denominated loan:

$$\$255,134*[1+ (0.0725/4)] = \$259,758.$$

The money market hedge locks in a payment price at the time of the December 2005 order equal to $259,758. This implies a 3-month forward rate of 1.1549 CAD/1 USD:

C$300,000 / $259,758 = 1.1549.

6. Describe a Forward Rate Hedge that can be used to eliminate the exchange rate risk associated with the Dec. 2005 order valued at C$300,000.

-The Dec. 2005 spot rate is 1.17CAD / 1USD.

-A 3 month forward rate at the time of the order is quoted at a bid price of 1.1590 CAD/1USD and an ask price of 1.1600 CAD/1 USD for transactions valued at $1 million or more.

A forward rate contract is an agreement between a corporation and a commercial bank to exchange a specified amount of currency at a specific exchange rate (forward rate) on a specified date in the future. Using a forward hedge to lock in an exchange rate implies the future price of the Canadian dollar would in effect be set today. This type of hedge ensured that whatever the spot rate in the future might turn out to be, the effective price paid for the shipment of goods would still be that which was agreed upon at the time the forward contract was established. For example, the exchange rate at the time of the Dec. 2005 order between the USD and CAD was 1.17 and the three month forward rate was 1.1590 for transactions valued at $1 million or more. Note the bid price is used in this example because St. Louis Chemical would be selling US dollars and receiving Canadian dollars. While a bank might quote a forward rate for a smaller amount, the most competitive forward rates are for larger transactions. If available, St. Louis Chemical would agree to buy C$300,000 at the time the invoice is due at an agreed upon rate today (regardless of the spot rate in the future) and use the Canadian dollars purchased from the bank to pay the Canadian supplier.

7. Describe the specific details of a Canadian dollar futures contract. Propose a Canadian dollar futures contract hedge that can be used to eliminate the exchange rate risk associated with the Dec. 2005 order valued at C$300,000.

-The Dec. 2005 spot rate is 1.17CAD / 1USD (indirect quote) or 0.8547USD/ 1CAD (direct quote).

- A March 06 Futures contract is quoted as 0.8620 (direct quote)

- A June 06 Futures contract is quoted as 0.8641 (direct quote)

- A September 06 Futures contract is quoted as 0.8659 (direct quote)

The purchase of C$300,000 worth of specialty chemicals by St. Louis Chemical invoiced in Canadian dollars has exposed them to a “natural short” position in Canadian

dollars for 90 days. In order to remove the currency risk, St. Louis Chemical must enter into a "long hedge" position in Canadian dollars of equal value. A futures contract hedge is provided by an instrument sold on the Chicago Mercantile Exchange (CME). Quotations for Canadian dollar futures are given as direct quotes. Futures contracts are established through a member of the futures exchange, usually a broker. Currency futures come in standard contract sizes (each Canadian dollar futures contract is for 100,000 Canadian dollars) and standard maturity dates (the third Wednesday of March, June, September, and December).

In order to trade on the futures market, the client must open and maintain a margin account with the broker. The current margin requirements on the Canadian dollar include an initial margin of $1,215 per contract and a maintenance margin of $900. In addition, the broker will charge a commission on all transactions. Buying a futures contract implies a long position and selling a futures contract implies a short position. As protection against loss from currency fluctuations, St. Louis Chemical would buy a sufficient number of futures contracts to create the long hedge. It could wait until the futures contract came to maturity and take delivery of the Canadian dollars paying the futures price previously established, assuming the delivery date and the invoice date were identical. More often, the invoice date and maturity date will not match and a hedge position will need to extend beyond the invoice date.

When the hedge position is no longer needed but before the futures contract reaches maturity, the futures contracts can be sold. If the Canadian dollar strengthens over the 90 days, the invoice (natural short) will cost more in terms of US dollars then what was expected. However, the hedge position will profit from the strengthening Canadian dollar. The net cost will be close to that which is established today. In order to fully hedge the Dec. 2005 order and take advantage of the full 60 days of free credit, St. Louis Chemical would buy 3 Canadian dollar June 06 futures contracts at the time of the order to establish a long hedge position. Because the invoice date is March 31, 2006 and the March 06 contracts expire on March 15, 2006 (the third Wednesday in March), a June 06 contract would be required to fully hedge the position. On March 31, the June 06 contract would be sold. Any profit on the futures trade resulting from a strengthening of the Canadian dollar over the next 90 days would offset a higher price paid for the Dec. 2005 order. Any loss on the futures trade resulting from a weakening of the Canadian dollar over the next 90 days would be compensated by a lower price paid for the Dec. 2005 order. The net result is that the cost of Dec. 2005 order is established at the time of the order.

8. Compare the strengths and weaknesses of a forward rate hedge and a futures contract hedge in terms of the following:

a) Size of the contract

b) Delivery date
c) Transaction costs

Forward Contract: The size of the transaction is tailored to an individuals needs, although most competitive rates (smallest bid/ask spreads) are for transactions involving $1 million or more.

Futures Contract: Futures contract sizes are standardized. One Canadian dollar futures contract represents C$100,000. While the Dec. 2005 order is for exactly C$300,000, many other transactions are not divisible by 100,000 and an over-hedging (a hedge position that exceeds the natural position) or under-hedging (a hedge position that is less than the natural position) of the natural position would result. If the order were for C$342,000, a long position in three future contracts would hedge most, but not all, of the natural short position as C$42,000 would remain unhedged. On the other hand, four futures contracts would represent an over-hedging of C$58,000. The potential overpayment or underpayment relative to the expected payment would be substantially reduced but not entirely eliminated.

Forward Contract: The delivery date is tailored to a specific date based St. Louis Chemical's anticipated payment date. However, there is no flexibility if shipment orders are delayed.

Futures Contract: Delivery date is standardized and is always the third Wednesday of the delivery month. A purchase of a futures contract with a delivery date extending beyond the estimated invoice payment date would provide additional flexibility if shipments were delayed. For example, a Dec. 2005 order is expected to arrive in Jan. 2006 with payment due 60 days after the end of the delivery month (March 2006). If the Dec. 2005 order experienced a delay in shipment and was not received until Feb. 2006, then payment would also be delayed until April 2006). Hedging a Dec. 2005 order with a June 2006 contract would allow for additional flexibility in the event of a shipment delay.

Forward Contract: The transaction costs involved in a forward contract are determined by the bid-ask spread. The larger the size of the transaction the lower the transaction cost (narrowest spread). Most forward contract hedges are for large transactions (typically involving $1 million or more).

Futures Contract: To trade on the futures market, a client must open and maintain a margin account with the broker. The initial margin requirement for a Canadian dollar futures contract is $1215 per contract and the maintenance margin requirement is $900 per contract. In addition, the broker will charge a commission for each transaction.

9. Describe a currency pair spot transaction. Discuss the strengths and weaknesses of hedging the Dec. 2005 order valued at C$300,000 using a currency pair spot hedge.

-The Dec. 2005 currency pair quote USD/CAD

Bid=1.1698 Ask=1.1702

The purchase of C$300,000 worth of specialty chemicals by St. Louis Chemical invoiced in Canadian dollars has exposed them to a "natural short" position in Canadian dollars for 90 days. In order to remove the currency risk, St. Louis Chemical must enter into a "long hedge" position in Canadian dollars of equal value. A currency pair spot hedge involves the buying of one currency and the selling of another simultaneously. For example, the USD/CAD currency pair refers to the US dollar and the Canadian dollar. The first currency, USD is referred to as the base currency. The second currency, CAD, refers to as the counter or quote currency. The currency pair exchange rate is given as a bid price and an ask price. An example would be a quote of USD/CAD 1.1698/02. The bid price of the USD/CAD currency pair is 1.1698 and the ask price of the currency pair is 1.1702. Buying one unit of the currency pair at the ask price implies buying one unit of the first, base currency and selling an equivalent amount of the second, quote currency (to pay for the base currency). Selling one unit of the currency pair at the bid price implies selling the first, base currency, to buy an equivalent amount of the second, quote currency. When a trader buys or sells a currency pair, the value of the currency pair, as an instrument, is close to zero. As market rates fluctuate, the value of the currency pair position held will also fluctuate. A margin deposit is required is case the position results in a loss. The initial margin deposit requirement may be as little as 1% of the value of the position, but is often slightly higher (2% or more).

In order to hedge the natural short position created by the Dec. 2005 C$300,000 order using a currency pair spot hedge, St. Louis Chemical would take a long hedge position equal to 300,000 Canadian dollars. Since the currency pair spot rate is quoted as USD/CAD 1.1698/02, St. Louis Chemical would establish a long hedge in Canadian dollars by selling 256,454 units of the currency pair USD/CAD. This would imply that the St. Louis Chemical is short US$256,454 and long C$300,000 Canadian dollars using the bid price of 1.1698. (C$300,000 / 1.1698 = 256,454) In 90 days, St. Louis Chemical would buy 256,454 units of USD/CAD using the ask price to close out the currency pair spot hedge. If the US dollars

weakens and the ask price of the USD/CAD currency pair is for example 1.16, then buying 256,454 USD/CAD will close the hedge position out (long US$256,454 and short C$297,487). St. Louis Chemical's account will show a balance (C$300,000-C$297,487) of C$2,513. Converting the balance (C$2,513) into US dollars will result in a profit of US$2,166 (C$2,513 / 1.16). The cost of the goods at invoice would rise from an expected US$256,410 to an invoice cost of US$258,621, a difference of US$2,211. The US$2,166 profit from the currency pair trade hedge will offset the higher cost of the goods.

The advantage of hedging with a currency pair transaction includes maturity date flexibility (the hedged position has no defined maturity date) and specific size determination (any size transaction can be hedged). The disadvantage may be higher transaction costs (margin deposit, bid/ask spread, and interest rate differentials) compared to a futures contract hedge, although an exact comparison of costs would have to be calculated on a case by case basis.

10. Make a recommendation to Williams regarding the exchange rate risk faced by St. Louis Chemical.

St. Louis Chemical faces an average of 90 days of transaction exposure due to Norcand's requirement of invoicing specialty chemical orders in Canadian dollars. In the event of a neutral exchange rate forecast for the Canadian dollar, Williams must decide if the addition risk faced by fluctuations in the exchange rate is worth assuming. The extent of transaction risk exposure can be explained to Williams using a value-at-risk methodology. In light of very thin profit margins faced by Chemical distributors, it is likely that Williams will decide to hedge the exchange rate transaction exposure. While there are many potential hedging mechanisms available, the most likely vehicles include a futures hedge or a currency pair spot hedge. Paying Norcand early has many disadvantages as described above. While a money market hedge will eliminate exchange rate risk, the cost of the hedge is relatively large given the spread between interest paid in US dollars and interest received from the deposit. In addition, the money market hedge may artificially inflate St. Louis Chemical's balance sheet due to additional deposits and loans used in the money market hedge. Forward rate hedges, while simplistic, are usually most cost efficient for large transactions ($1 million or more) and not readily available for smaller transactions. At present, the amount of transaction exposure per order is likely too small to utilize the forward markets. A futures contract hedge provides flexibility in terms of maturity but in most cases will not provide a complete hedge (over-hedging or under-hedging) for orders not divisible by 100,000. However, a significant amount of transaction exposure will be reduced through the futures hedge. A currency pair spot hedge has many advantages in terms of size (any size order can be fully hedged) and maturity flexibility (no defined maturity date). A direct comparison of

the actual transaction costs (margin requirements and brokerage commissions for the futures hedge versus the margin requirements and bid/ask spread involved in a currency pair spot transaction) between a futures hedge versus a currency pair spot hedge would have to be calculated on a case by case basis. However, due to interest rate parity, the difference between a futures hedge and a currency pair spot transaction is minimal and often times is simply a matter of preference. From an operational perspective, Williams will also have to clearly specify who is responsible for managing transaction exposure and make explicit any constraints on the use of exposure-management techniques. Finally, Williams will need to develop a system of monitoring and evaluating any risk management activities his company chooses to engage in.

THE EFFECT OF CHANGES IN ACCOUNTING FOR DEFINED BENEFIT PENSIONS AND OTHER POSTRETIREMENT BENEFIT PLANS ON COMPANIES' FINANCIAL STATEMENTS AND STAKEHOLDERS

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CASE DESCRIPTION

The primary subject matter of this case concerns changes in accounting for defined benefit pensions and other postretirement benefit plans proposed and promulgated by the Financial Accounting Standards Board (FASB) and their effects on the financial statements of companies that currently sponsor these plans. Secondary, yet important issues are the potential effects of these changes on companies' willingness to offer these plans to their employees, and the resulting potential economic impact on the companies' stakeholders. This case has a difficulty level of three to four and can be taught in about 45 minutes. Approximately two hours of outside preparation is necessary to fully address the issues and concepts. This case can be utilized in intermediate accounting as part of the coverage of pensions, or in a more advanced graduate class focusing more extensively on underlying conceptual and economic issues. The case has conceptual, analytical, and research components. Both oral and written communication skills can be enhanced using this case.

CASE SYNOPSIS

Since the introduction of the first pension plan by American Express in 1875, traditional (defined benefit) pension plans have become an important source of millions of employees' retirement income. At one time, defined benefit pensions, which promise employees a specific amount of retirement income, represented the most common type of employer-sponsored plan. Legislation, especially the ERISA ACT of 1974 and the creation of the Pensions Benefit Guarantee Corporation (PBGC) added security to these benefits. Sadly, these traditional pensions have become less popular. In 1981, 81% of employees who were covered by employer-sponsored retirement plan were covered by a traditional pension plan; by 2003, that percentage decreased to 38% (Clements, 2006). This trend appears to be continuing. For example, recently, several large well-known public companies have decided to freeze their existing pension plans. Reasons for this reduction in traditional pension plans include the financial risk to the employer, and the uncertainty created by

negative or low-performing stock markets. Other postretirement plans (e.g., postretirement health care) also have become less popular, primarily due to rising costs.

Changes in accounting for traditional pensions and other postretirement benefit plans may sharply increase the liabilities and expenses and decrease the equity shown on companies' financial statements and may further increase the risk and cost of these types of plans. These changes may affect employers' willingness to continue offering these plans.

The primary focus of this case is to examine the potential short-term and long-term effects of recently promulgated and expected accounting changes on companies' (1) financial statements, (2) stakeholders, and (3) willingness to offer these plans. The case can be taught at the same time that retirement benefits are covered in an intermediate accounting class, or in an advanced accounting class focusing primarily on underlying concepts. The case has analytical, communication, and research components.

INSTRUCTORS' NOTES

Teaching Strategies

This case focuses on FASB's promulgated and expected changes in accounting for defined benefit pensions and other postretirement benefit plans, and the potential impact of these changes on companies' (1) financial statements, (2) stakeholders, and (3) willingness to offer traditional pensions and other postretirement plans to their employees. The case has conceptual/analytical as well as research components. Written and/or oral communication skills can be enhanced utilizing this case.

This case can be utilized in intermediate accounting as part of the coverage of pensions or in a more advanced graduate class focusing primarily on underlying conceptual issues. The case could be solved in groups during class time, or it could be assigned as a group or individual homework project. In either case, students should review the case prior to discussion in class. The research component can be utilized as an extra credit assignment or as a regular assignment.

Students should be encouraged to focus not only on the financial statement effects, but also on the economic consequences of accounting standards and changes in these standards. The relevance and reliability, and thus the usefulness of financial information should be emphasized. The instructor may wish to point out that in the long-run capital markets tend to become more efficient when accounting information provides full disclosure and relevant as well as reliable information. Enhanced disclosure and accruals tend to enhance usefulness. The case will require about two hours of outside preparation if completed solely as an assignment. Detailed in class discussion will require about 45 minutes.

The research questions are particular pertinent for a graduate accounting class, but can also be assigned as an individual or group research project in intermediate accounting. These questions

are shown in the research section. These include questions regarding other companies' reactions to the changes, historical economic effects of issuance of SFAS 106, and legislative changes recently enacted by Congress.

If used in a graduate level class, additional focus on underlying theories, such as the theory of economic consequences could be stressed. Sometimes, companies' reactions to changes in accounting may adversely affect some stakeholders.

Suggested Answers to Questions

Students may want to present the answers in the format of a memorandum to the controller.

To: Jackie McKiern, Controller
From: Student's Name, Accounting Assistant

RE: Expected Effect of Changes in Accounting for Defined Benefit Pension and Retiree Health Care Plans

Below, as requested, are answers to the questions you asked me to research. Please let me know, if I may be of further assistance.

On September 29, 2006, FASB issued SFAS 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans - an amendment of FASB Statement No. 87, 88, 106, and 132 R." For public companies, most of the provisions of SFAS 158 will be effective for fiscal years ending after December 15, 2006. The answers below incorporate changes promulgated by SFAS 158 as well as expectations of potential future changes under phase two. To date, no exposure draft for phase two of FASB's project has been issued; I will keep you abreast of any changes.

Company-specific questions

1. What would be the short-term impact on Neuman Company's a) balance sheet, b) income statement, and c) statement of cash flows?

When the provisions of SFAS 158 become effective, Neuman Company will have to recognize any underfunded amount related to both its defined benefit pension plan and its retirement health care plan as part of the company's comprehensive income and also recognize a liability. Based on year 2005 financial date, for the pension plan, the amount that would have to be recognized is $293,000 on the balance sheet (the difference between the PBO and the plan assets). For the retiree health care plan, the amount is $1,100,000 (the

accumulated obligation that is currently unfunded). On the balance sheet, the effect of recognizing the unfunded obligations could be quite significant, reducing equity, increasing liabilities, and reducing the company's net worth. In addition, unrecognized prior service costs and actuarial gains or losses arising during the current period would have to be recognized as part of comprehensive income. Based on 2005 financial data, this amount would have been $137,000, the difference between the estimated and actual returns.

In the short-term, the income statement would not be affected. No short-term cash flow effect would occur, unless the company decides to increase its funding status.

2. What would be the long-term impact on Neuman company's a) balance sheet, b) income statement, and c) statement of cash flows?

After SFAS 158 becomes an effective standard, Neuman Company will have to recognize any underfunded amounts in both the pension plan and the retiree health care plan in the company's comprehensive income. On the balance sheet, the long-term effect could be quite significant.

If under phase two, the actual return on plan assets may have to be utilized to calculate income, income will also be affected via the calculation of the periodic pension cost and other postretirement benefits cost (retirement health care cost). In the long-term, the company would tend to have to increase its cash contributions to mitigate the negative effect on the income statement and balance sheet.

3. What options does the company have?

The company has four basic options:

Option 1) Continuing the existing plans: Neuman can continue with the existing defined contribution pension and health care plans, regardless of the impact on the company's financial statements.

Option 2) Discontinuing the defined benefit pension plan and switching to a defined contribution plan: Neuman Company can discontinue the plan and switch to a defined contribution plan, such as a 401(k) plan. This would reduce uncertainty and risk for the company and reduce potential income volatility.

Option 3) Discontinuing all retirement plans: Neuman Company could discontinue (freeze) all retirement plans.

Option 4) Discontinuing the health care plan: Neuman Company could discontinue or curtail the retirement health care plan only.

4. How would implementing each of these options affect the company's a) balance sheet, b) income statement, and c) statement of cash flows?

Option 1) Continuing the defined benefit plan: The effect will be the same as outlined in questions 1 and 2. Since the defined benefit pension plan and especially the retirement health care plan are underfunded the company likely would have to show a long-term liability on its balance sheet, which would significantly change key financial ratios. To mitigate the effect on the balance sheet liabilities and equity, the company could increase its funding of the plans, which could significantly decrease its cash available for other purposes. If FASB decides that the actual return on pension and other postretirement benefits assets must be utilized to calculate the periodic pension cost (expense) income will fluctuate. This tends to be undesirable. To mitigate any negative effect on income that may occur under the phase two expected change, the company could encourage the pension plan trustee to change the investment mix made by the plan; more conservative investments combined with an optimally diversified portfolio may smooth the returns over time and avoid potentially sharp fluctuations in costs.

Option 2): Discontinuing the defined benefit plan and changing to a defined contribution plan: This will result in a predictable income statement effect, with no income and cash flow surprises; cash flow will be equal to the contribution. If the contributions are funded, the balance sheet will not be affected.

Options 3 and 4): Discontinuing all or some of the retirement plans: Discontinuing all (or some) of the retirement plans likely will increase income and cash from operations. No differential effect on the balance sheet is likely (except for the increase in the cash balance).

5. Who are the stakeholders? Who would benefit from each option?

The company's primary stakeholders are the company, its executives, investors, employees and their families, fund managers, and the public.

Option 1): Defined benefit plans continued: the employees benefit by being able to count on a certain definite amount of benefits. The employer bears the risk of market changes.

Option 2) Change to a defined contribution pension plan: the employer and shareholders benefit by knowing exactly how much the period expense will be; the employees bear the risk of market changes.

Options 3 and 4) Discontinue some or all of the defined benefit plans: The company and shareholder likely would benefit in the short-run. However, in the long-run, decreased employee satisfaction may adversely affect the company's ability to hire and retain highly qualified individuals. This could negatively affect the company, its shareholders, and potentially the public.

The CFO may or may not have a bonus plan that is tied to income. If that is the case, the CFO may benefit by an income increase caused by a curtailment of retiree benefits.

6. How would the employees be affected by each of these potential options?

Option 1) Continuing the defined benefit plans: Less risk for employees; the employees can count on receiving a specific amount of retirement income and health care coverage; this increases financial security.

Option 2) Defined contribution plan: higher risk for employees; perhaps less retirement benefits upon retirement.

Option 3) Cancelling all retirement plans: If the company cancels all retirement plans, the retirees would incur considerable risk and potentially financial hardship during retirement.

Option 4) Cancelling the health care plan only: If the company froze its retirement health care plan, the future retirees would encounter considerable risk and uncertainty and potentially incur considerably higher cost in the future.

7, What are the ethical issues involved?

The ethical issues are balancing the competing interests of the employees, the company executives, and stockholders. Promises made to employees and their welfare must be considered. Also, as a for-profit entity, this company has a commitment to maximize investors' return.

8. How would each of these options affect the perceptions of people outside the company?

Options 1 and 2) Continuing the existing plans or switching to a defined contribution pension plan: The company likely will be viewed as a caring, employee-friendly employer.

Options 3, 4) Cancelling or freezing benefits plans may impact how employee-friendly a company is perceived. In the long run, the company might find it more difficult to attract highly qualified employees. Also, customers' views may be negatively affected if the company chooses to restrict or freeze such plans.

Additionally, some investors may perceive a pension plan as reducing the company's profitability; on the other hand, investors may view changing to a defined contribution plan as a sign of financial stability and decrease in long-term risk exposure.

9. What do you recommend that we, the company should do?

Answers will vary. Each answer should be supported by focusing on the interests of the stakeholders that are viewed as most important.

Some issues to consider: The CFO wants the company to perform well, which is in the best interest of the stockholders . However, he should not be motivated by self-interest and the effect on a potential bonus plan. The CFO and other executives must make decisions that will help balance and enhances the long-term interests of all and particularly its primary stakeholders.

Researchable Questions

1. How have other companies reacted to this proposed change?

Some companies, such as Verizon and IBM, have frozen their defined benefit pension plans and are now offering defined contribution plans (Wessel et al., 2006). The effect of this change is a shift of the financial risk from the employers to the employees. It also somewhat reduces compliance and financial reporting costs mandated by FASB, the Labor Department, and other regulatory agencies.

2. Is there any historical evidence that new accounting rules and proposals may lead to decreases in employee retirement benefits?

SFAS 106 for the first time required that postretirement benefits other than pensions, such as retiree heath care, must be accrued periodically. Up until that point, companies typically

recorded expense only when benefits were paid in cash. Research by Mittelstaedt et al. (1995) suggests that companies curtailed their retiree health care benefit plans after SFAS 106 was issued. This can be considered a negative economic consequence affecting employees. For example, in 1988, 66% of the employers with more than 200 employees provided health care benefits for their retired employees. This has decreased to about 33% today. (Wessel et al., 2006). Some of this decrease has been attributed to SFAS 106 requiring accrual accounting for these plans.

3. Are other companies' pension and other retirement plans currently funded?

According to one article (Byrnes & Welch, 2005), only 22% of postretirement benefit plan obligations are covered by assets, while 88% of the pensions are. In addition, large companies currently carry approximately $300 billion in pension and other postretirement benefits off their balance sheets (Byrnes & Welch, 2005). Total underfunded pension benefits are estimated at $313 billion (Solomon, 2006).

4. How does recent legislation impact on traditional pension plans?

August 2006, President Bush signed a new pension bill into law (Wessel, 2006). Consistent with this new law, companies must fully fund their pension plans. This rule is effective 2008 and companies will have seven years to fully fund any underfunded plans. Once this law and FASB's new pension standards go into effect, accrual accounting and cash flow for pension plans will become more consistent. These changes are likely to cause significant changes for companies' financial statements and may affect employers' willingness to offer such plans.

REFERENCES

Byres N. & D. Welch. (2006, January 30). More Than Meets the Eye. *Business Week*, 3969, 84.

Clements, J. (2006, March 8). The Debt Bubble Threatens to Derail Many Baby Boomers' Retirement Plans. *The Wall Street Journal*. (March 8), D1.

Financial Accounting Standards Board (2005). FASB News Release 11/10/05 "FASB Adds Comprehensive Project to Consider Accounting for Pensions and Other Postretirement Benefits, retrieved on January 4, 2006 from http://www.fasb.org/news/nr111005.shtml.

Financial Accounting Standards Board (2006, September 29). Statement of Financial Accounting Standards No. 158. Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans - an amendment of FASB Statement No. 87, 88, 106, and 132 R. Retrieved on October 12, 2006 from www.fasb.org.

Mittelstaedt, H.F.,W.D. Nichols & D. Regier. (1995) SFAS No. 106 and benefit reductions in employer-sponsored retiree health care plans. The Accounting Review, Vol. 70, 4, 535-556.

Solomon, D. (2006, August 5). Pension Measure to Enact Changes Over Several Years. *The Wall Street Journal*. Retrieved on Aug. 9, 2006, from http://online.wsj.com/article.print/ SB115473692721227591.html.

Wessel, D., E.E. Schultz, & L. McGinley. (2006, February 8) Pressured GM Slashes Pay, Benefits. *The Wall Street Journal*, A1,15.

Wessel, D. (2006, August 3). The Big Pension Bill: Is That All There is? *The Wall Street Journal*, A2.

CREDIT CARDS, DEBIT CARDS AND MONEY DEMAND

Amanda S. King, Georgia Southern University

CASE DESCRIPTION

The primary subject matter of this case concerns the effect of the introduction of credit cards and debit cards on money demand. The objective is to allow students to apply the results of the four theories of money demand to the changes that are occurring/have occurred in the financial sector. The case has a difficulty level of 3 or 4 and would be appropriate for use in money and banking, financial economics, or intermediate macroeconomics courses. The case is designed to be taught in 1-2 class hours and is expected to require 3-4 hours of outside preparation by students.

CASE SYNOPSIS

John Williams recently returned from a trip on which he realized that he no longer needed cash—not even at fast food restaurants. Everyone accepts credit and debit cards these days. He becomes concerned that this may mean that money is going away. He begins to look into the idea of a cashless society. Certainly credit and debit cards will play a large role in a cashless society. He quickly realizes that to truly understand the impact of credit and debit cards, he will have to understand their impact on money demand (specifically M1 and M2). He researches the four key theories of money demand—The Quantity Theory of Money, Keynes's Liquidity Preference Theory, Friedman's Modern Quantity Theory of Money, and the Baumol-Tobin Model—and comes up with a list of questions applying the impacts of credit cards and debit cards to the results of the models.

INSTRUCTORS' NOTES

This case allows students to apply a financial innovation to the models of money demand. Thus the case allows the students to work with the theories of money demand that they have encountered in lecture and interpret results given a change in the financial market. This case would be an especially useful way to end a section on money demand since it reinforces the traditional theories while allowing students to think about credit and debit cards, two methods of payment that they are very familiar with.

CASE QUESTIONS AND ANSWERS

1. Typically, economists assume that technological innovations in the banking industry will lead to an increase in the velocity of money.

a) Is this true for the introduction of credit cards? Explain. Does your answer change if you define money as M2 instead of M1?

b) Is this true for the introduction of debit cards? Explain. Does your answer change if you define money as M2 instead of M1?

c) Explain how an increase in velocity would occur for the general case of a technological/financial innovation.

a) Credit cards may function in two ways, as a method of borrowing and as a medium of exchange. If we assume that the card is functioning as a medium of exchange, then the number of purchases made with cash or checks should fall, leading to a decrease in money demand (when money demand is defined as M1), and therefore an increase in velocity. (Recall that velocity is defined as PY/M and thus if total purchases remain unchanged but less are made with M, M falls and thus V rises.) If we define money as M2 instead of M1 our answer depends on how households hold the income that they are not using immediately to make transactions. If this income goes into something such as a savings account then M2 is unaffected—income is merely transferred from an account that is more liquid to one that is less (recall M1 is part of M2). This would seem the reasonable reaction of households that plan to pay off the credit card bill at the end of the month. If the households move the money into other types of even less liquid assets though, M2 could fall as well. Given that the card is being used as a medium of exchange and NOT a method of borrowing this seems less likely.

If the credit card is functioning as a method of borrowing, velocity may remain unchanged. Households continue to demand the same level of money in order to make their standard purchases and then make extra purchases.

b) The introduction of debit cards should not change velocity when money demand is defined either as M1 or M2. In order to use the debit card instead of cash, deposits equal to the value of the cash must be available. Both cash and deposits are money so M1 doesn't change. Since M1 is included in M2, M2 does not change either.

c) Assume a financial innovation that allows households easier access to funds. The household does not need to hold as many funds in M1 or M2 at any given time. Thus M decreases while PY remains unchanged. Since velocity= PY/M, this leads to an increase in velocity.

2. Consider the Baumol-Tobin Model.

a) Given the general assumption that households want to maximize interest earned on "bonds" while minimizing the number of trips made to the bank to switch between bonds and money, which instrument should households use, credit cards or debit cards?

b) How would the model predict that M1 would be affected if more households began using credit cards to make their daily transactions? How would the model predict that M2 would be affected?

c) Under this model, would there be any reason to use debit cards? Which would be preferable, debit cards or checks?

d) If credit cards were used according to this theory, would consumer revolving credit (credit debt) levels rise? Why or why not?

a) Credit cards should be used. The use of credit cards allows households to hold their earnings in some sort of interest bearing asset for longer, because the use of the credit card allows them to make purchases while postponing payment.

b) M1 should fall if more households begin using credit cards to make their daily transactions based on Baumol-Tobin. This is because households should move money out of M1 and into accounts that have higher yields (such as savings accounts or money market accounts). M2 might not be affected at all. Money that used to be held in M1 could be moved to M2 and since M1 is included in M2 there would be no change in the overall value of M2 (assuming the "bonds" held based on Baumol-Tobin are assets that help make up M2).

c) Under this model, there is no reason to use debit cards. In fact, paper checks would be preferable. Paper checks take longer to clear than do debit cards, therefore allowing a household's income to stay in an interest bearing account (if it is a checking account with interest) for longer than it would if a debit card is used.

d) If credit cards were used, there would be no reason to expect consumer revolving debt (credit debt) to rise. The household would make purchases on the credit card throughout the month, hold its income in an interest bearing account, and then at the end of the month transfer the amount charged into an account from which the credit card could be paid off.

3. Keynes's Liquidity Preference Theory asserts that there are three motives for holding money—1) a transactions motive 2) a precautionary motive and 3) a speculative motive.

a) Which motives would be affected by the introduction of credit cards into the economy? What would be the end result on money demand based on Keynes's Liquidity Preference Theory? Explain.

b) Which motives would be affected by the introduction of debit cards into the economy? What would be the end result on money demand based on Keynes's Liquidity Preference Theory? Explain.

a) Since a credit card can be used as a method of payment the transactions motive would be affected. Households could use the credit card to make purchases during the month instead of using money, and therefore money demand from this motive would fall. The precautionary motive for money demand would also be affected. Instead of needing to hold large sums of money for emergencies, a household can now choose to hold a credit card to protect against unexpected expenses. The speculative motive should not be affected by the introduction of the credit card. Based on the changes to the transactions motive and the precautionary motive, money demand based on Keynes's Liquidity Preference Theory would decrease.

b) A debit card is a plastic/electronic check. It clears faster than a paper check but in essence it is still a check. Its introduction into the economy should have no impact on any of the motives in Keynes's Liquidity Preference Theory. It is merely a different way of writing a check. If, however, people perceive that the transactions costs of using a debit card are less than the transactions costs of using a credit card (or even using a paper check), the introduction of the debit card could actually induce more people to hold more money in order to take advantage of the ease of electronic payments without the pitfalls of credit. (The major increase in transactions costs of credit over debit would be the possible danger of falling into debt.)

4. Based on Friedman's Modern Quantity Theory of Money, when would you expect credit card usage to rise—as interest rates in the economy rise or as they fall? When would you expect debit card usage to rise—as interest rates in the economy rise or as they fall?.

(Note to the instructor: this question is a "trick" question in that it is asking about movement in all interest rates, but what really matters in this particular model are changes in relative interest rates. This question also leads to the opportunity to talk about short-run versus long-run outcomes, as Friedman's result is really a long-run result. Interest rates will not adjust immediately in all markets.)

Friedman believed that the when the interest rate on other assets rises, banks will begin to compete to keep deposits coming in, thereby raising the return on money. This means that the spread between the return on money and other assets will remain constant. Thus, in this model, interest rates have no effect on the demand for money. According to the results for Friedman's Modern Quantity Theory of Money, changes in interest rates should have no impact on credit card or debit card usage because they should not affect the level of money that households desire to hold. This however, could be considered a long-run result (the zero profit result in a competitive market). In the short-run, however, relative shifts in the interest rates on bonds and equity could lead to changes in the demand for money. As the interest rate on bonds or equity rise (before banks have time to adjust to the change) the relative spread on the interest rates will rise, leading to a decrease in money demand. In order to keep consumption levels constant, you would expect credit card usage to increase as the relative spread between bonds or equity and money increases (which would lower the demand for money), and credit card usage to decrease as the relative spread between bonds or equity and money decreases (which increases the demand for money). As the relative spread between bonds and equity and money rises in the short-run, you would expect debit card usage to fall as money demand falls. As the relative spread between bonds and equity and money falls in the short-run, you would expect debit card usage to increase as money demand rises.

5. Based on the four theories of money demand, are there any generalizations that can be made about what occurs when credit cards are introduced into the economy? What about when debit cards are introduced into the economy? If there are similarities among the results generated by each model, why do four theories of money demand persist in economics?

In every case, if credit cards are used by convenience users (so as a method of transaction not as a method of borrowing) then money demand will decrease. Since debit cards are plastic/electronic checks, money demand should not be affected by their introduction. If however, consumers feel that it is easier to make transactions because of the debit card and increase their level of spending then money demand could increase. Each of the theories of money demand allows economists to focus on a different aspect of the economy. In some instances new theories were introduced as a means of explaining a phenomenon that one of the other theories was unable to explain (for example, the Quantity Theory of Money cannot deal with the relationship between money demand and interest rates but Keynes's Liquidity preference adds in assumptions that allows it to deal with this issue). In other instances, the focus changes from economy-wide impact to household level (the

Baumol-Tobin model takes the individual perspective; the others give a more aggregate perspective).

Note to the instructor: For those who wish to add some discussion of international ramifications of the introduction of credit and debit cards, ask students to consider how credit and debit cards impact the international demand for dollars. The discussion could proceed as follows.

In general, credit and debit cards should not impact the international demand for dollars. Many credit and debit cards are accepted worldwide. If a British consumer wants to make a purchase in New York City, she may do so with her credit card or debit card. Has the purchase taken place in pounds instead of dollars? No. The credit card bank handles the exchange from pounds to dollars for the consumer instead of the consumer making the exchange before making the purchase. From this perspective, the international demand for dollars should remain unchanged. However, if foreign consumers perceive that it is now easier to make purchases abroad, their consumption behavior could change. If the foreign consumer is now more willing to make purchases abroad, because the trouble of exchanging currency has been eliminated, then the demand for foreign currency (dollars in this case) could increase.

This could lead to interesting discussions on exchange rates, balance of trade, and the regulatory environment for international financial markets.

REFERENCES

Aizcorbe, A. M., A. B. Kennickell, & K. B. Moore (2003). Recent Changes in US Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances. *Federal Reserve Bulletin*, 89(1), 1-32.

Caskey, J. P. & G. H. Sellon, Jr. (1994). Is the debit card revolution finally here? *Economic Review Federal Reserve Bank of Kansas City*, Fourth Quarter, 79-95.

Cecchetti, S. G. (2006). *Money, Banking, and Financial Markets.* McGraw, Hill, Irwin.

Duca, J. V. & W. C. Whitesell (1995). Credit Cards and Money Demand: A Cross-sectional Study. *Journal of Money, Credit, and Banking*, 27, 604-623.

Federal Reserve Bank. H.6 Release—Money Stock and Debt Measures. http://www.federalreserve.gov/releases/h6/Current/.

Hubbard, R. G. (2001). *Money, the Financial System, and the Economy.* 4th edition, Addison Wesley.

Humphrey, D. B., L. B. Pulley, & J. M. Vesala (2000). The check's in the mail: Why the United States lags in the adoption of cost-saving electronic payments. *Journal of Financial Services Research*, 17, 17-39.

King, A. S. (2004). Untangling the Effects of Credit Cards on Money Demand: Convenience Usage vs. Borrowing. *Quarterly Journal of Business & Economics*, 43(1&2), 57-80.

King, A. S. & J. King. (2005). The Decision between Debit and Credit: Finance Charges, Float, and Fear. *Financial Services Review*, 14(1), 21-36.

Mishkin, F. S. (2004). *The Economics of Money, Banking, and Financial Markets.* 7th edition, Pearson Addison Wesley.

UPHEAVAL IN AN ORGANIZATION: A CASE OF ORGANIZATIONAL MISMANAGEMENT?

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CASE DESCRIPTION

This case has a difficulty level of two (appropriate for sophomore-level students) and is designed to be taught in approximately 1-1/2 hours. It would be most appropriate for discussion and analysis in basic management courses when the topics of leadership, ethics, and managing diversity are covered. The case would also be appropriate for discussion in basic marketing and marketing management courses when the instructor is ready to discuss ethics in marketing. In addition, the case would be appropriate for discussion in separate Human Resources and Ethics courses.

CASE SYNOPSIS

In the wake of numerous recent corporate scandals, there has been renewed interest in the subject of leadership and what makes a true leader. While much of the attention has been focused on high-level executives and the impact their actions have had on the internal and external stakeholders of entire corporations, this very attention has caused some managers at all levels, as well as instructors of management and leadership, to take a closer look at the actions or behaviors of leaders. Of particular interest is how these behaviors are guided by a person's ethical standards. Because the behavior of managers or leaders can affect the organization's performance, and because this performance, especially in a marketing organization, has a direct impact on customer satisfaction, an understanding of these leadership behaviors becomes critical. And if diversity is an added element in the situation, the need for understanding is even greater. The following case relates the actual experiences of a third-level manager of a diverse marketing communications group as she deals with difficulties resulting from the actions of her superiors. The case focuses on the impact the behaviors of her organization's leaders had on her, her department, and at least one group of the organization's customers.

INSTRUCTORS' NOTES

Recommendations for Teaching Approaches

Analysis of the case will give students the opportunity to examine different leadership styles, particularly with respect to the impact these styles can have on the effectiveness of an organization.

The case will allow students to examine the role ethics plays in management in so far as leader-follower exchanges and performance appraisals are concerned, particularly when organizational diversity is an issue. Finally, the case will afford students the opportunity to examine the dynamics of diversity as a component of Human Resources management. The case is particularly intriguing because it centers on a manager who is both a female and an African American, whose superiors are all Caucasian, and who has made a concerted effort to abide by the organization's stated diversity and Affirmative Action guidelines.

Teaching Objectives

Through analysis of this case, students will be expected to:

- Illustrate their understanding of basic management principles by developing a plan of action for the Marketing Communications Planning department going forward.
- Demonstrate their understanding of the various leadership behaviors by identifying the behaviors of the principals in the case with leadership responsibilities. Students should also be expected to recommend leadership behaviors that might have been more appropriate.
- Illustrate their understanding of, and appreciation for, the complexity of managing diversity as a component of human resources management by developing a plan of action that they themselves would follow if they were in the positions of Sharon, Sam, Lewis, and Donna.
- Demonstrate their understanding of the behavior of subordinates by analyzing and evaluating the actions of Sharon and Norma with respect to their superiors.
- Demonstrate their ability to recognize the role ethics plays in management by identifying the moral philosophies being followed by the principals in the case and illustrating how these philosophies can have an impact on the effectiveness of the organization both internally and externally. Students will be expected to write a report showing how a manager's treatment of his/her subordinates may be a predictor of that manager's ethical reasoning with respect to marketing and general business practices.
- Illustrate their knowledge and understanding of Title VII of the Civil Rights Act of 1964—as well as the Civil Right Act of 1991 amending several sections of Title VII—by identifying what parts of the law appear to have been violated and explaining Sharon's legal options.

Teaching Methodologies

With leadership, ethics, and diversity being prominent issues in management, instructors will have considerable latitude in the use of this case. For example, some instructors may use the case simply as a basis for discussing whether there is a difference between leadership and management. Students can be asked to describe Sam as either a leader or high-level manager and to support their descriptions based on evidence from the case and their knowledge of how leaders and managers are defined. These descriptions could then be used as a basis for discussing differences and similarities.

Because the three issues – leadership, ethics, and diversity – are so intertwined, however, the case affords instructors opportunity to introduce a variety of activities for students. For example, as an expansion of question 4, the instructor could have students write a paper discussing the different ethical systems and moral philosophies (universalism, egoism, utilitarianism, etc.) and indicating the philosophy they believe Sam is following based on evidence presented in the case. As an extension to question 5, students could be asked to recommend a leadership behavior or style they believe would have been more appropriate for Sam to use. This exercise would enhance students' understanding of how leadership behavior should be adapted to the situation. With respect to the diversity of Sharon's department, the instructor could require students to do research not only into the EEOC and Title VII of the Civil Rights Act of 1964—as suggested in question 4—but also into the composition of the marketing profession (particularly the marketing communications sector) by gender to determine if Sharon's group is unusual. Students could also be asked to research companies in the telecommunications industry for information regarding the diversity in these companies.

Suggested Questions and Answers

1. Now that the department is without a manager, without leadership, what action should Lewis and Donna take?

Lewis and Donna are obviously in a quandary now that Norma has flatly refused to accept the temporary acting manager position. Some students may suggest that since the department has accomplished such great things for the company, it may be capable of operating on its own for a while without direct supervision; the department may be operating as what Bateman and Snell (2004) refer to as a self-managing team. On the other hand, despite their capabilities and accomplishments, the sudden news that their manager is leaving could demoralize the department, especially since up until this time, they have been kept in the dark concerning the whole situation. The instructor may wish to elicit discussion on the importance of organizational communication, both downward and upward. The instructor may also wish to expand the discussion on communication to include what Howell and

Costley (2006) refer to as fair and just social exchanges. According to the authors, if high-quality exchanges are to be developed, both the leader and the follower must view the exchange as fair or just. Below is one example the authors list as an ineffective social exchange behavior:

A leader showed little understanding of a follower's job problems and needs, and blamed all the problems on the follower's lack of effort. When the follower attempted to explain her perceptions of the problems, the leader constantly interrupted her and ignored her explanation. (Howell & Costley, 281)

Students will undoubtedly recognize this behavior as being demonstrated by Sam.

Beyond recognizing the need for Lewis and Donna to communicate with the department members, however, Students will probably have several suggestions as to what action should be taken to ensure that the department will be able to function. These suggestions should be discussed and evaluated based on the management and leadership concepts the instructor has covered with the students.

2. Comment on Norma's refusal to accept the assignment of "acting manager." Should she be punished for insubordination? What does her action indicate about her moral philosophy?

This question is a natural follow-up to question 1, since one of the actions students might suggest could be that Lewis and Donna punish Norma in some way. It might be suggested that Norma be fired for refusing to accept the job that her management is now saying is her job; however, students must be made to see that taking this action could very well exasperate conditions by demoralizing the department even more. It may also be suggested that Lewis and Donna again try to convince Norma to accept the position, perhaps by appealing to her sense of duty to the organization.

With respect to the moral philosophy Norma appears to be demonstrating, some students will probably recognize it as virtue ethics, "a perspective that goes beyond the conventional rules of society by suggesting that what is moral must also come from what a mature person with 'good' moral character would deem right." (Bateman and Snell, 140) These students might also feel that Norma is in the principled stage of Kohlberg's model of cognitive moral development, the stage at which a person takes a broader perspective in which they see beyond authority, laws, and norms and follow their self-chosen ethical principles. Other students may argue that Norma simply seems to be looking out for herself, that is, that she is demonstrating egoism, a type of teleology, because she is just doing what

will maximize consequences for herself. At this point, the responsibility of followers could also be discussed.

3. Which leadership behavior or style do you think was being demonstrated by Sam in his relationship with Sharon? Cite evidence to support your answer.

Students should recognize that there are several approaches to understanding leadership, as discussed in most management or leadership texts (Bateman and Snell, 2004; Howell and Costley, 2006; Griffin, 2005; among others). While a discussion of leader traits such as drive and integrity are a good starting point, the instructor should strive to get students to see that leader behaviors in different situations provide a deeper understanding of how leaders relate to followers and how they effectively guide their organizations to greatness. As Howell and Costley (2006) explain, there are three key tasks effective leaders must carry out to fulfill their role in increasingly complex organizations: (1) diagnose situational and follower characteristics (to determine the extent to which followers need a particular leadership behavior), (2) provide the leadership behavior needed by followers, and (3) develop followers or modify their tasks or environment (to allow them to act more effectively or independently of the leader).Students should be asked to indicate how well Sam performed these tasks; the instructor may also wish to ask about Lewis and Sharon's performances in this regard, although the case does not provide much evidence to support an answer either way. The instructor should also stress that as Howell and Costley note, the different leadership behaviors are usually used in combination with one another, combinations that often result in several typical leadership styles. Students should be asked to indicate into which of these leadership styles (Coach, Human Relations Specialist, Controlling Autocrat, Transformational Visionary, or Servant) Sam seems to fall.

4. Would you classify Sam's behavior toward Sharon as unethical? Why or why not? What bearing, if any, do you think Sharon's race of gender had on Sam's behavior? Explain your answer. What recourse does Sharon have if she believes that Sam's behavior toward is due to racial or gender discrimination?

Some students may feel that based on his behavior, Sam appears to have a personal vendetta against Sharon. If this opinion is expressed, the instructor can use this as an opportunity to discuss the relationship of power to ethical behavior. As Howell and Costley (2006) note, leaders are often in roles that can determine the well-being of others, and in this case, Sam was the orchestrator of Sharon's downfall. The authors further note that perhaps the most important and most difficult ethical issue is the leader's power, as it is the basis for a leader's influence on followers. Howell and Costley also note that when leaders interact

with followers to achieve goals, there is an implicit assumption that both parties will behave fairly and ethically. This is essential in order for them to trust one another, and trust is needed for mutual cooperation. Because unethical behavior by high-level leaders in large organizations has been the topic of several scandals in recent years, more responsible leadership is being demanded. Unethical leaders do not treat everyone fairly; they often benefit themselves and inflict harm on other, including followers, customers, and investors who trusted them. By doing this, they destroy the commitment and willing cooperation of these other parties, commitment and cooperation that are needed to make their organizations prosper.

This issue, however, goes far beyond either fairness or ethics. The instructor should stress that Sharon is an African-American female who is recognized in the industry—and up to this time, by her employer—for her expertise and accomplishments. Therefore, Sam's attack on her character and reputation, at the very least, hints at racial or gender discrimination. It is at this point that the instructor can draw students' attention to the legal aspects of the case. Investigation into the Equal Employment Opportunity Commission (EEOC) and to Title VII of the Civil Rights Act of 1964, as well as the 1991 amendment to sections of Title VII, will enable students to identify which laws Sam appears to be violating and to recommend legal courses of action that Sharon can pursue if she so desires. Students can be directed to begin their search at www.eeoc.gov. From this Web site, they will be able to obtain facts and guidance related to discrimination by race and gender/sex, and they will find a direct link to Title VII. They will learn that Title VII protects individuals against employment discrimination on the bases of race and color, as well as national origin, sex, and religion, and that it prohibits race and color discrimination in every aspect of employment, including recruitment, hiring, promotion, wages, benefits, work assignments, performance evaluations, training, transfer, leave, discipline, layoffs, discharge, and any other term, condition, or privilege of employment. After becoming aware of even the basic provisions of Title VII and the objectives of the EEOC, many students will probably conclude that Sharon's situation does constitute some form of discrimination for which she has legal recourse.

Before delving into a discussion of Sharon's legal recourse, however, the instructor may want to explore with students Sharon's options within the company. After all, the case suggests that the company had clearly-stated diversity and affirmative-action guidelines by which Sharon herself had diligently abided. Evidence of this can even be seen in the make-up of her department. Although she may not have been solely responsible for the department's being half African-American and half Caucasian, for example, evidence in the case clearly demonstrates that she was not practicing discrimination. She had promoted Marge, a Caucasian, twice and had given her permission to work from home on several occasions during family emergencies. And one of the African-Americans in her

group believed that Sharon had rated her lower than a Caucasian because Sharon wanted to promote the Caucasian. The argument can also be made that given Sharon's current position in the organization, the company as a whole makes at least some attempt at affording all employees equal opportunity.

It can be assumed, then, that the organization believes in being proactive with respect to diversity and equal opportunity. Therefore, some students may suggest that, as the EEOC itself recommends as a first step, Sharon escalate the issue to upper management, who may have a vested interest in ensuring that all managers follow EEO guidelines and promote the company's own diversity and affirmative-action policies. On the other hand, other students may note that Donna, the Vice President and Sam's superior, is already aware of the situation and yet, has done nothing about it other than to condone Sam's actions. Based on Donna's behavior, Sharon may have concluded that escalation of the problem internally would be to no avail. Therefore, it would appear that if Sharon believes her employment rights have been violated, her best recourse at this time would be to file a charge of discrimination with the EEOC, the commission empowered to prevent any person from engaging in any unlawful employment practice as set forth in Title VII.

The extent of the discussion surrounding the legal issues will depend on the amount of time the instructor can devote to this aspect of the case. Regardless of the amount of time allotted, however, the major point that needs to be made is that given the severity of the situation, Sharon does have some legal recourse, provided she is willing to initiate such actions. The instructor may even wish to revisit this question after sharing the epilogue with students.

5. What impact do you think the situation overall will have on the rest of the Marketing Communications Planning department? On the organization as a whole? Given that the case is about management of a marketing communications planning department, what impact do you think the situation will have on the ability of the department and the organization as a whole to satisfy the needs of customers?

The instructor should point out that responsible leadership plays a critical role in establishing the ethical climate of an organization; leaders provide the role model for everyone in the organization. If the rest of the department views Sam's actions as being unjust, this may undermine their faith in management and the organization. Members of Sharon's former group could begin to feel that if something like this could happen to her, either one of them could easily be next.

The point of this discussion is to emphasize that a leader's behavior has a definite effect on followers. Howell and Costley (2006) point out that a leader's behavior has its most direct impact on the psychological reactions of individual followers and groups of followers.

While students should be able to readily see the impact Sam's behavior has had on both Sharon and Norma, they should be asked to speculate as to what effect Sam's behavior will have on the organization as a whole, including its ability to satisfy customers. The negative effects of a leader's behavior could very well translate into an inability to adequately meet the needs of customers. If this happens, the overall mission of the organization could be compromised. The ultimate goals of an organization – to satisfy the needs of customers and achieve the objectives of the organization – must begin with efficient management of the organization responsible for achieving those goals. If the organization itself is in upheaval, its ability to function is severely hampered.

6. Do you think the composition of Sharon's department (all female and equally divided between African-Americans and Caucasians) might have had a bearing on Sam's behavior? Why or why not?

Considering the number of females and African Americans in Sharon's organization, some students may believe that Sharon has carried the concept of diversity too far. In fact, some students may even be of the opinion that with no males in her organization, Sharon is guilty of reverse discrimination. If this opinion is expressed, the instructor should point out that it is not unusual for marketing departments to be comprised of a large percentage of females. With respect to the high number of African Americans in the department, some students may find it unusual that fifty percent of Sharon's group is African American, whereas this group constitutes a much smaller percentage of the organization as a whole. Therefore, they may argue that perhaps Sam thought Sharon was moving too fast, taking things too far. In addition, some students may speculate that breaking the department up might have been Sam's goal all along. This speculation will give the instructor an opportunity to explore the complexities of managing a diverse organization. The instructor may want to ask, for example, "What happens when a manager (in this case, perhaps Sam) believes that an organization is becoming" too diverse?"

If Sam does hold such a belief, and if he is somehow thwarting Sharon's efforts at diversity, then he is working against the company's policies. If his superiors suspect that Sam may have a problem with abiding by these policies, then they will need to begin monitoring his behavior and to take appropriate steps, perhaps including diversity training, to modify it. In any case, the question will allow instructors the opportunity to explore with students the skills required in managing a diverse workforce.

EPILOGUE

Deciding, after Norma's refusal to assume the acting manager position, that no one else in the department was capable of handling the assignment on a long-term basis, the decision that Lewis and Donna made was to rotate the position among the various department members. Each member of the department would thus act as the department manager for a period of one or two weeks until a more permanent solution to the dilemma could be found. Norma refused to be a part of the "rotating manager" solution; instead, she began looking for a position outside of the department, and within a couple of weeks had landed a new job in which she would be in charge of marketing communications for one of the company's "new ventures" organizations. These intrapreneurial organizations were charged with creating and marketing new innovative products, and Norma was thrilled about the amount of independence the new position would afford her. She began her new assignment immediately after the Users Conference. It had now been three weeks since she had first learned that Sharon would be leaving.

After one cycle of rotating managers, Lewis and Donna finally named one remaining member of the department as the more permanent acting manager. This solution lasted for about two months, as by that time all but two of the department members had transferred to other organizations. Ultimately, the two remaining department members were made a part of the larger corporate marketing communications organization, a move that resulted in the loss of much of the original department's independence, uniqueness, and ability to respond quickly to customers, both internal and external. In fact, Norma heard from several members of the sales teams, as well as from some customers, that members of the Users Group were becoming increasingly dissatisfied, as they were not getting the attention they had become accustomed to getting.

Sharon did well in her new assignment as manager of training for the Product Marketing organization, receiving good verbal feedback from Lewis regarding her performance. However, on November 30, in a meeting with Lewis for a formal review of her performance for the year, Sharon learned that on a scale of 1 to 9, she had been rated a "2". Lewis informed her that this was primarily due to Sam's comments on her performance as manager of the Marketing Communications Planning department, but that he would be a bad manager if he ignored these comments. Sharon was given 60 days to find a new job or face a demotion. Lewis informed her that he would, of course, have to show her job evaluation to anyone who asked and that this would probably ruin her attempts to get a new job at her current level. And, indeed, this was apparently the case, because Sharon was unsuccessful at finding a comparable new position. On December 11, she met with Lewis and informed him that she had decided to accept the demotion and that she was taking the rest of the year off beginning the following Monday. Apparently, due to the stress she had been under, Sharon had begun having stomach pains on December 4, pains that were so severe by December 29 that she could not get out of bed and could not eat. She had lost several pounds, and when she went to see the doctor again, her blood pressure was 200/110. She was immediately given medication to lower

her pressure and had to stay in the doctor's office until some improvement was shown. Sharon was referred to a stomach specialist and was given a test to try to determine the cause of her pains. On January 5, she returned to her doctor because she had also started having chest pains. She still could not eat, and as a result had lost 12 pounds. Her EKG was normal, but her blood pressure still required medication. The specialist set Sharon up for an invasion procedure to determine the cause of her illness. By this time, she was feeling delirious, she still could not eat, and she was completely bedridden. The invasion procedure revealed that Sharon had a stomach bacteria and a hernia. She was given an acid reliever, two antibiotics, and told to continue taking her blood pressure medication.

On February 15, Sharon returned to work. However, she was still experiencing crying spells, so at some point in March, she decided to go into mental therapy.

REFERENCES

Bateman, Thomas S. & Snell, Scott A. (2004). *Management: the New Competitive Landscape. (Sixth Edition).* New York: McGraw Hill/Irwin.

Griffin, Ricky, W. (2005). *Management (Eighth Edition).* Boston: Houghton Mifflin Company.

Howell, Jon, P. & Costley, Dan L. (2006). *Understanding Behaviors for Effective Leadership. (Second Edition).* Upper Saddle River, NJ: Pearson/Prentice Hall.

SLASTYONA CONFECTIONARY (A and B)

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CASE DESCRIPTION (A)

The primary subject matter of this case is the development of human resources management policies, specifically compensation, in a challenging and changing environment – Russia. Secondary issues are managing organizational change and leadership. Instructors in different disciplines (International Management, Human Resources Management, Change Management, and Leadership) should emphasize different aspects of the case. The case has a difficulty level of four; it is appropriate for senior level and first year graduate students. The case is designed to be taught in 1 1/2 class hours and requires 3 hours of outside preparation by students. The case may be taught with or without the Slastyona (B) case. The case is based on field research. The names of the company and managers have been disguised.

CASE DESCRIPTION (B)

The subject matter of this case is leadership and managerial competence. The case has a difficulty level of four; it is appropriate for senior level and first year graduate students. The case is designed to be taught together with the Slastyona (A) case, or in a follow-up class for approximately 1/2 hour. The B case requires 1 hour of outside preparation by students.

CASE SYNOPSIS (A)

Slastyona was a Russian confectionary firm with the foreign multinational corporation, INTERCHOC, as its majority shareholder. Through explosive growth (80% per year in volume from 2000 to 2003), Slastyona had captured a dominant share of the Russian market. In summer 2004, Slastyona's expatriate president, Jeffrey Walker, and Human Resources Director, Martina Espinosa, in light of the company's plans for further growth, hired an international team of management consultants. The consultants were asked to develop compensation policies including job analysis, job evaluation and grading, and pay scales for Moscow headquarters, the four confectionary factories, and sales offices throughout the country The HR Director's goal was to implement policies that would "attract, retain, and motivate high performing individuals in sales, manufacturing and support staff functions." The influx of MNCs to Russia had distorted pay standards in the country, creating a sellers' market for English speaking managers. Slastyona planned to transform its Factory A in the city of Nizhniy Novgorod into a "flagship" factory by

investing in sophisticated, modern plant and equipment. HR and particularly compensation policies were needed to support growth. However, implementation of changes met with resistance by the expatriate General Manager of Factory A, Wilton Winchester.

Given the large investments already made in and planned for Factory A, and given the company's high expectations that it would become the "flagship" factory, the president asked the management consultants what should be done to implement their recommendations.

CASE SYNOPSIS (B)

The B case is designed to complement the Slastyona Confectionary (A) case by providing additional information on Wilton Winchester's leadership and competencies by providing a verbatim interview transcript. Winchester is the General Manager of Slastyona's Factory A. A team of management consultants completed a compensation project in the Slastyona A case and was to do a follow-up assignment that included interviews with managers. The B case begins President Jeffrey Walker asking the consultants "what they have learned" after interviewing Winchester. The rest of the case contains a transcript of a semi-structured interview with Winchester, designed to elicit comments that reveal behavior indicative of his leadership and managerial competencies.

INSTRUCTORS' NOTES

Suggested Teaching Approaches

Instructors may assign either the A case alone or both the A and B cases. The cases are appropriate for advanced undergraduate and graduate courses in International Management, Human Resources Management, Managing Organizational Change, and Leadership, The cases focus on three learning areas:

1. International HRM / Compensation: understanding the process and complexity of implementing human resource management policies in a context of flux and change (A case).
2. Managing Organizational Change: applying a model of organizational diagnosis and developing a plan for managing organizational change (A case; the B case provides context).
3. Leadership and Competency Assessment using an interview transcript. Students can assess the leadership style and managerial competencies of the factory general manager based on the interview. For some courses, a cursory analysis of the B case may be sufficient to understand Winchester's resistance to change. In others, instructors may ask students to prepare an in-depth assessment of Winchester, using a leadership, emotional intelligence (EI), or cognitive capability framework. EI and cognitive capability are discussed below in this Instructor's Note. (B case).

Instructors may wish to pre-assign readings that may assist students in their case analyses. Krishnan (2001) and Elenkov (1998) describe the Russian business environment and Russian managers, as well as the applicability of Western H.R. practices in Russia. For a technical analysis of the H.R. practices (job analysis, grading structures, and compensation design) a Human Resources Management text may be used, such as Greer (2001) or Ivancevich (2004). McGuire (2001) and Nadler & Tushman (1989) provide guidance on assessing change management programs. For case B, instructors may suggest an assessment of Winchester's emotional intelligence as per Goleman (1998); visionary leadership (Sashkin & Sashkin, 2001 or Sashkin, 1998); or cognitive capability (Jaques, 1998).

UNDERLYING BUSINESS ISSUE

The presenting problem is the implementation of a pay structure that would support the business strategy of aggressive growth and allow Slastyona to attract, retain and motivate high performing employees in a complex and changing environment. The pay and related HR policies need to take into account the goal to create a state-of-the-art "flagship" factory in Factory A. While pay needs to be well managed, the underlying problem is getting the flagship factory ready, which implies staffing, structure, and management policy changes. At Factory A, there are two main barriers to change: (1) flux in the country environment, labor market, and lack of information about what HR policies will best support the new technology – all of which make planning difficult, and (2) lack of vision and support, and resistance to change in Factory A by the General Manager, Wilton Winchester. Any change program has little chance of success in Factory A without Winchester's leadership and support.

Learning Objectives: International Hrm / Compensation

Instructors can review the content of the policies and practices implemented, and the process by which they were implemented by management consultants working at Slastyona. Instructors might ask students to compare the policies and procedures with those described in Compensation or Human Resources Management textbooks, in order to critique the work of the consultants. The actions taken by the management consultants included:

1. Job Analysis and Job Descriptions (JDs).

Ivancevich defines job analysis as "the process of systematically collecting information on the important work-related aspects of a job," and job description as a written summary of the job, derived through job analysis (2004, p. 158), used by organizations in five main areas: recruitment and selection; training and career development; compensation; organizational design and

restructuring; and strategic HR planning. Describing jobs can be a useful way to get mangers to think about a growing organization, and JDs are necessary if firms adopt job-based compensation systems. The consultants trained jobholders, who wrote descriptions of their own jobs. Working with interpreters and translated documents, the consultants facilitated superior - subordinates discussions to clarify how accountabilities cascaded down the structure. As problems were uncovered, changes in jobs and the organizational structure were introduced.

2. Job Evaluation.

Job Evaluation (JE) is the process of determining the relative importance or "weight" of a job within an organization, typically by assessing the job on a set of compensable factors (Greer, 2001). Instructors may wish to lead a discussion of the pros and cons of job evaluation, which remains an important part of many companies' HR system, but has been rejected by many as being an "old-fashioned Taylorian" technique. (For a discussion, see Greer 2001, pp. 231-237). JE, properly implemented, typically involves training a committee in the JE method, and committee discussion of each job description, leading to a consensus on its evaluation. Although JE systems are presented as "scientific," they involve a great deal of judgment by evaluators. The consultants trained and facilitated two job evaluation committees, who evaluated the jobs based on job responsibilities and required knowledge, skills and abilities - job requirements, not incumbent abilities or capabilities.

3. Grading.

JEs can be used to develop grading structures and pay scales, in traditional job-based compensation policies. In the A case, after job evaluation, the consultants proposed a 16-grade structure, which was approved by the committee. Instructors may wish to discuss the difference between traditional grades like Slastyona's and broadbanding, the "reduction in the number of salary bands/ pay grades" (Greer, 2001, p. 234). Greer provides the example of General Electric, where the number of pay bands was reduced to five for all employees. Broadbands permit very large pay increases without promotion, and large differences between the salaries of people within the same band. Traditional grades allow for (in fact require) promotions for significant increases in base salaries, and limit the differences between the highest and lowest paid persons in any given salary grade. Slastyona's grade structure is traditional; base salary midpoints increase by about 20% consistently, and the increase from the minimum salary and the maximum salary in any grade is exactly 50% (minimum =80% of midpoint salary, maximum =120% of midpoint salary).

4. Study of the labor market and definition of pay scales.

Using the best available data on the pay market in Moscow, the consultants defined pay values (minimum, maximum and midpoint per grade) in a logical structure.

5. Development of Regional Pay scales.

Russia is the largest geographic country in the world, with vast differences in pay in different cities and oblasts (districts). Moreover, accurate pay market data was virtually unobtainable in 2004 outside of Moscow and St. Petersburg. The consultants decided to develop a market-based pay structure for Moscow and then "anchor" the other pay scales to Moscow by using cost of living (COL) indices. In other words, they calculated regional pay markets as a percentage of the Moscow market. Most students will find that this was both a defensible and a clever solution – given the lack of hard data – but some students may regard this approach as crude. Instructors might note that updating the pay scales should be relatively easy by using the approach recommended by the consultants.

6. Analysis of inequities and recommendations of pay adjustments.

Each employee's pay was compared to the recommended pay structure, and individual adjustments were recommended to align base salaries with the new pay scales.

7. Guidelines for future merit increases and promotions.

The process used by the consultants is "classical," logical, and practical. It is individual (not team-oriented), job-based (not competency or skill based) and hierarchical (not flat or with broad bands). A traditional approach like the one described in the case is likely appropriate given Slastyona's future growth and the opportunities for promotion that growth will bring. It is also appropriate for Russian culture (discussed further below). However, additional changes to the compensation system may need to be made to take into account skills development (for new hires being trained on new, sophisticated equipment) and teamwork. The case writer believes that the consultants' approach was appropriate given Slastyona's circumstances and Russian culture; however instructors may wish to generate discussion around alternative approaches, such as broadbanding (for a discussion, see Greer, 2001).

The appendix to the case provides data on the culture of Russia from Hofstede (2001). Firms need to consider adopting HR systems and policies that fit with local culture and circumstances in order to support strategic objectives. According to Newman and Nollen (1996), the financial performance of the subsidiaries of a multinational is highest when management practices are aligned with national culture. Hofstede's data indicate that Russia is significantly higher than Western Europe and the U.S. on power distance and uncertainty avoidance, and is significantly more short-

term oriented. Russian culture is masculine and individualistic. Russian society has for many years been built on great loyalty to family and reliance on hierarchy with personal loyalty to respected leaders. Well organized, "bureaucratic" systems can work well in such a cultural environment, and individualized merit pay can be successful, but only to the extent that policies are clearly communicated and fully supported by senior management.

Learning Objectives: Managing Organizational Change

Instructors can use the Slastyona case to help students acquire skills in organizational diagnosis using a change management model. Students can be asked to assess the need for change and develop a change management action plan. Students are likely to encounter the following issues:

1. The need for a disciplined approach to managing organizational change that takes account of all of the relevant organizational components – not simply policy changes.

2. The potential for failure if certain components are ignored or underestimated.

3. The extra difficulty associated with certain types of change barriers – leadership at the factory, and Russian national culture.

4. The additional complexity involved in a change process conducted in a challenging foreign environment by a multi-national corporation.

Students should be encouraged to put themselves in the role of the management consultant advising the president of Slastyona. Instructors may ask students to develop recommendations for change (see Exhibit 3 below).

Type of Change Needed.

Nadler and Tushman (1989) proposed a typology of large-scale organizational change along two dimensions: Timing in relation to key external events (Anticipatory v. Reactive), and Scope of Change (Incremental v. Strategic), resulting in four classes of organizational change.

Incremental changes focus on "individual components [of one organization], with the goal of maintaining or regaining congruence" among them. Changes that "address the whole organization, including strategy, are strategic changes" (Nadler & Tushman, 1989, p. 196). Reactive changes are responses to events / changes in the external environment, while anticipatory changes are done in anticipation of external events that may or may not occur (Nadler & Tushman, 1989).

Exhibit 1: Types of Organizational Change (Nadler & Tushman, 1989)		
	Incremental	Strategic
Anticipatory	Tuning	Re-orientation
Reactive	Adaptation	Re-creation

The case can be analyzed on at least two different levels. At the firm level, the type of change is tuning; that is, incremental change in compensation policies in anticipation of future growth. At the Factory A level, the changes are anticipatory but strategic – it becomes obvious that deep change is needed to create the "flagship" factory that is hoped for, thus a re-orientation.

The implications of the different types of change are described in Nadler and Tushman (1989). One of the most important consequences of classifying the Factory A change as re-orientation is that for a re-orientation to be successful, a visionary leader is needed. The case describes how Walker has not assumed a visionary leadership role and analysis should indicate that Winchester is not capable of, nor interested in, doing so.

APPLYING A CHANGE MANAGEMENT FRAMEWORK.

McGuire (2001) suggested analysis of the organization's performance, external environment and available resources, as well as eight "internal" levers of change. (See Exhibit 2 below). Organizational Change can be introduced by changes in the external environment or access to resources or by "pulling" one of the eight internal levers. Sustainable, organization-wide change requires that at least 3 levers of change are pulled simultaneously. The levers of change in the center of the model (Mission/strategy, Culture and People) are the most difficult to change and have the greatest potential impact on organizational performance. "Sustainable, organization-wide change requires that at least three of the levers of change be pulled simultaneously" (McGuire, 2001, p. 2).

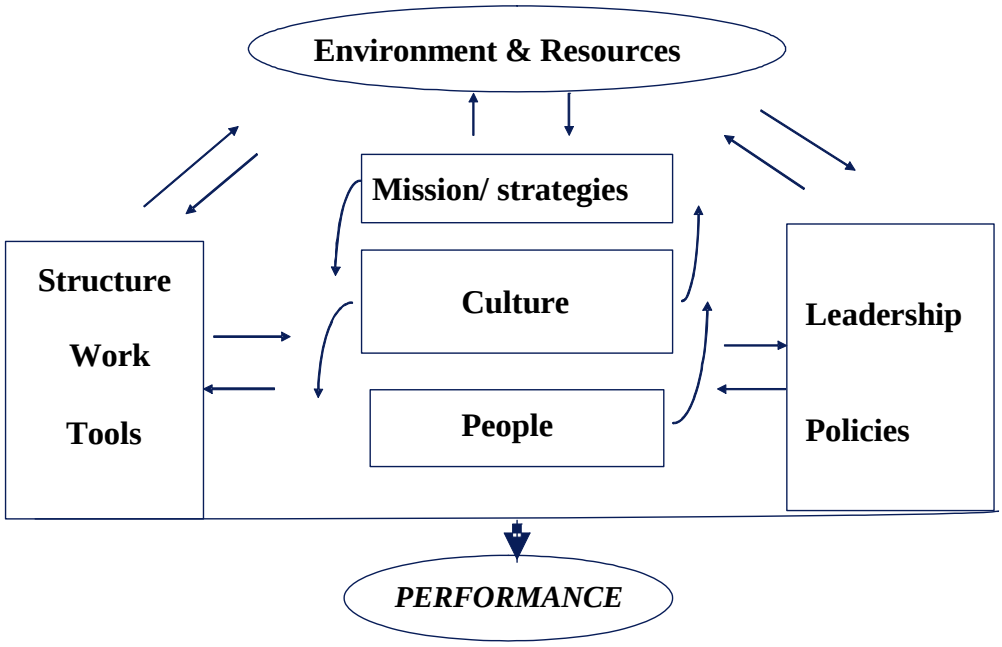
PERFORMANCE. It is unclear from the case that Factory A is prepared for the new technology and organization required to become the flagship factory. Future performance will be jeopardized if management actions (compensation, staffing, and policies) are not taken now.

ENVIRONMENT & RESOURCES. The 'new' Russia has adapted quickly to capitalism. The Russian labor markets have become competitive; managers and professionals capable of working in an MNC are scarce and command increasing salaries. There is also a scarcity of qualified technicians in some cities, and Slastyona can no longer rely on the state technical schools and universities to produce people with needed skills for the future. Less traditional employees (more female managers, possibly technicians or managers from other areas of Russia or neighboring countries) may be needed to staff Factory A as it grows.

MISSION / STRATEGIES. Slastyona produces, sells and markets confectionery products using the brands of its multi-national parent company INTERCHOC as well as locally developed

brands. Slastyona's strategy is to use sophisticated Western business practices to entrench itself as the leader of the Russian confectionery market by introducing a full brand portfolio, aggressive marketing, and developing production and distribution capability for the entire vast country. Slastyona cannot continue to implement its strategy without the requisite number of high performing employees in the sales, manufacturing and support functions (see PEOPLE below).

Exhibit 2.
LEVERS OF ORGANIZATIONAL CHANGE (McGuire, 2001)



ORGANIZATIONAL STRUCTURE. Slastyona is organized with a functional structure with each factory operating as a separate profit and loss center. Within Factory A, all major functions report to Winchester except sales and marketing. It is likely that the new technology will make use of teams – although teams are not explicit in the case. Additional changes may need to be made in structure, work design, and compensation so that teams can be used effectively.

CULTURE. According Winchester, Factory A is still using "communist working practices" which are as different from INTERCHOC practices as "night and day." If accurate, this statement encapsulates the most pressing changes to working practices that the firm needs to bring about. Cultural change and changing people's attitudes and behavior are not achievable by simply altering compensation policies. Nonetheless, Slastyona may wish to consider how the compensation system can be adapted to encourage aspects of the existing culture and personal attitudes that have positive

potential for the corporation. For example, a combination of team and individual reward systems may be more likely to produce higher factory performance in Factory A than rewards given just to individuals.

It is unlikely that cultural change will be brought about without intensive training - and not just technical training designed to master new equipment. Winchester's assumption that Nizhniy Novgorod employees simply wish to perpetuate Soviet era working practices may simply reflect that this is all that they know. It appears that nobody has taken the time to explain to the employees what changes are coming and what new behaviors are expected.

Instructors may also wish to analyze Russian culture in relation to the West, which likely will result in the conclusion that some of the policies implemented by the management consultants are aligned with Russian national culture. (See the Appendix to the A case). PEOPLE. Winchester has six managers directly reporting to him with various levels of organization beneath the managers, going as far as five more layers down to the production line workers. A major concern for Slastyona is how to establish a highly skilled workforce for the new, sophisticated equipment. Hiring, training, staffing, socialization, and retention will be critical in the next few years.

LEADERSHIP. A Change Leader has been described as one who assesses the need for change, crafts a vision of a desired future state, develops a guiding coalition and oversees the entire change process (Nadler & Tushman, 1989). In Factory A, successful implementation of new policies will require Winchester's leadership. However, Winchester's leadership style is not likely to assist Slastyona to achieve the desired changes. His comments in the interview transcript (B case) reveal a short-term management focus and an apparent disinclination towards a team approach. He also appears to be a sexist. Winchester seems only interested in supporting a small number of his own personally developed protégés, and it is unclear that he is able to develop managers. The danger of such apparent tunnel vision is that Factory A may end up with insufficient or unqualified managers. Given the difficulty of attracting and retaining qualified personnel in Russia, it is important that the General Manager has the trust and respect of Factory A's employees. High employee turnover and resulting capability gaps could seriously undermine the steps that have been and are being taken to create the "flagship" factory.

POLICIES. "Policy changes do not cause action to occur; action is taken by people." (McGuire, 2001, p. 2). Currently, firm policies originate from two areas; either dictated by the headquarters in Moscow and implemented at the local level or created by Winchester and enforced. Winchester is reluctant to introduce professional HR systems, a function he appears not to hold in high regard. In the A case, Winchester remarked, "You HR people come down and forget we have a factory to run.……I don't think we need to come up with a Soviet-type plan in order to figure out what the salaries should be here, I really don't."

WORK. As Factory A automates and upgrades equipment, manufacturing jobs will change. Changes in working habits and practices will not be achieved overnight or at all unless the work

force understands and is motivated to meet the company's objectives. Additionally, teamwork is likely to become more important.

TOOLS. The transformation of Factory A is primarily technology-driven. The tools used at the plant level are primarily manufacturing processes and equipment. The factory will adopt highly automated equipment, requiring extensive training. At the same time, it is inevitable that some of the new equipment and process innovation will contribute to the elimination of the jobs of some Factory A employees. Slastyona should be prepared to address this potentially disruptive issue ahead of time by, to the extent that it is possible, re-training and transferring workers to other jobs.

RECOMMENDATIONS FOR CHANGE. According to McGuire (2001, p. 2), "Sustainable, organization-wide change requires that at least three of the …levers of change be pulled simultaneously." Changes in 5 of the levers are suggested – although students may develop additional recommendations:

Exhibit 3.: Recommendations for Change at Factory A

Mission/ Strategies	Factory A needs to commit to the strategy of becoming a flagship manufacturing site, and communicate this to all stakeholders. Factory A's G.M. must endorse the strategy and get directly involved in its implementation.
Leadership	Factory A's G.M., Wilton Winchester is resisting change. He will need to be convinced that the process is not a return to "Soviet-style" planning practices and supports the flagship factory strategy. Either Winchester gets "on board" with the change program or he needs to be replaced.
Policies	The new compensation policies should be implemented – plausibly with changes that take into account skills development and teamwork.
Tools	Changing the tools alone to higher technology will not be sufficient – training, socialization, changes in structure, teams, and rewards must be aligned with the changes in tools.
Culture	The consulting team has already begun to change the way employees think about their work. Employees were trained to "describe their own jobs" through job analysis. This introspection has developed the need to plan for the future of the plant. The culture needs to promote accountability and delegation of responsibility, develop future managers, and encourage teamwork. Further changes need to reflect a culture of technological sophistication and shared values about teamwork and quality.

Learning Objective: Assessing Leadership and Managerial Competence

The B case provides part of a transcript of an interview of Wilton Winchester. The management consultants used a semi-structured interview approach to elicit comments revealing Winchester's leadership and managerial competence. Winchester was asked to tell three stories: one story in which he achieved success at Slastyona, a second story in which he did not succeed (at Slastyona or elsewhere), and a third story of either success or failure. The B case contains a partial transcript of Winchester's first story, a success. The management consultants would use the

interview transcript to code for leadership and managerial competencies, however their findings are not revealed in the B case.

Instructors can ask students to "code" the interview transcript. Typically, coding is done by highlighting or marking passages that reveal behavior. Coding can be done using any of a number of frameworks familiar to the instructor. For example, the interview transcript could be coded against a model of Emotional Intelligence (Cherniss and Goleman, 2001; Goleman, 1998), Visionary Leadership (Sashkin & Sashkin, 2002; Sashkin, 1995), stratified systems theory (Jaques, 1990, 1998), or other models of leadership and management competence.

Students will quickly note that people do not talk the same way they write. The verbatim interview transcript is revealing of Winchester's style and in some ways it is not flattering.

ASSESSMENT OF EMOTIONAL INTELLIGENCE.

Since the 1920s, probably in reaction to the emphasis that was being placed on IQ tests in Europe and the United States, writers have suggested that "something more" than academic or abstract intelligence explained why people were successful in life and leaders were successful in organizations. Some Emotional Intelligence (EI) researchers credit E. L. Thorndike's (in his 1920 Harper's Magazine article) as the first to propose "social intelligence," however a theory and measure were only developed some 15 years later by a group of George Washington University researchers (Landry, 2005). The George Washington measure of social intelligence included judgment in social situation, recognition of the mental state of a speaker, observation of human behavior, memory for faces and names, and judgment of facial expression. Unfortunately, the measure did not stand up well under research scrutiny and has largely been abandoned (Landry, 2005). The term "emotional intelligence" was coined by Wayne Payne in his 1985 doctoral dissertation, but only received attention when Salovey and Meyer (1990) studied the topic; they defined EI as something far broader than social intelligence, namely, "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). EI was popularized by Daniel Goleman (1995, 1998), who proposed that it involved self-motivation and persistence; skill at introspection; delay of gratification; self-control of impulses, moods and emotions; empathy; and social skill, typically described in five components (See Exhibit 4 below.) Goleman (1998) also claimed that, "… the most effective leaders are alike in once crucial way: they all have a high degree of what has come to be known as emotional intelligence. …my research … clearly shows that emotional intelligence is the sine qua non of leadership."

Much of the research reporting a link between EI and effective leadership has been done by or in association with consulting firms, and some researchers remain skeptical of the construct and/or how it has been defined and measured (Locke, 2005; Landry, 2005; Conte, 2005). However, EI has become widely accepted by managers and scholarly research is presently being carried out

to refine and substantiate it. In fact, researchers have claimed that an "affective revolution" has occurred in organizational behavior (Barsade, Brief & Spataro, 2003).

Instructors might ask students to assess Winchester on Goleman's proposed components of emotional intelligence. Students who have done a thorough analysis of Winchester's transcript should conclude that his Motivation is very high, but his Empathy and Social Skills are lower than one would expect of a manager in his current position, and probably deficient for the job of building and running a "flagship" factory. Winchester also appears to be a sexist – which is surely a drawback given the difficulty of finding qualified people in Russia. Winchester is clearly not a visionary, is more technical than managerial, and has a short-term focus.

Exhibit 4: Five Components of Emotional Intelligence (Goleman, 1998).	
SA – Self-Awareness	The ability to recognize and understand your moods, emotions, and drives, and their effect on others
SR – Self-Regulation	The ability to control or redirect disruptive impulses and moods. The propensity to suspend judgment – to think before acting
M – Motivation	A passion to work for reasons that go beyond money or status. A propensity to pursue goals with energy and persistence
E – Empathy	The ability to understand the emotional makeup of other people. Skill in treating people according to their emotional reactions
SS – Social Skill	Proficiency in managing relationships, building networks, and finding common ground

ASSESSMENT OF COGNITIVE CAPABILITY. Students might also use Jaques' (1990, 1998) stratified systems theory in their analyses (see Exhibit 5 below). The complexity of creating the flagship factory in Nizhniy Novgorod suggests that the General Manager position should be at Jaques' stratum V, and stratum VI or VII is needed at the head (president/CEO) of Slastyona. Winchester's cognitive capability appears to be stratum IV (possibly III), based on the interview transcript (B case). His focus on relatively short term projects, as shown in the interview, may be interfering with the development of a longer term plan (and associated management policies) for Factory A's growth.

Exhibit 5: Levels of Cognitive Capability and Hierarchy (Jaques, 1990, 1998)	
Stratum	Time Span of Discretion
VIII	50 years
VII	20 years
VI	10 years
V	5 years

Exhibit 5: Levels of Cognitive Capability and Hierarchy (Jaques, 1990, 1998)	
Stratum	Time Span of Discretion
IV	2 years
III	1 year
II	3 months
I	1 day

EPILOGUE

After the compensation project (A case), the management consultants accepted a follow-up assignment to advise Slastyona on how best to implement the necessary organizational change process at Factory A. The follow-up assignment (briefly described in the B case) included semi-structured interviews of managers to assess leadership and managerial competence.

To identify what needed to be done to implement policy changes, the consultants (with Martina Espinosa, Director of Human Resources), had several meetings with Winchester and the managers at Factory A. It rapidly became obvious that Winchester (a) was not an effective change leader, (b) was focused on the short term, and (c) had difficulty dealing with Martina Espinosa. Winchester's insensitivity to what was required to bring about performance improvements from his employees and his general lack of respect for the HR function led to several disputes between him and Espinosa. After much discussion, Walker (president of Slastyona) removed Winchester from the G.M. position; Winchester assumed a different role in another INTERCHOC subsidiary.

Slastyona adopted a number of the recommendations in this Instructor's Note as it further developed its "flagship" factory in Nizhniy Novgorod, including a pay-for-skills acquisition program and extensive training of new hires and management development sessions for middle managers and technicians. Additional staffing, policy, and organizational changes are will be needed in Factory A and throughout Slastyona as the company grows.

SUGGESTED ASSIGNMENT QUESTIONS AND POSSIBLE ANSWERS

1. What is the underlying business issue at Slastyona? (A case)

The presenting problem is the implementation of a pay structure that would support the Slastyona's strategy of aggressive growth. While pay needs to be well managed, the underlying issue is preparation of the flagship factory, which requires visionary leadership by the G.M, staffing changes, structure changes, and new management policies. (See p. 2 above, Underlying Business Issue.)

2. What type of change is needed? Analyze the organization using a change management framework – what changes are needed for Factory A to become a "flagship" factory? (A case. B case for additional information.)

At the firm level, the type of change is tuning; that is, incremental change in compensation policies in anticipation of future growth. At the Factory A level, the change required is re-orientation (anticipatory and strategic), which implies that a visionary leader is needed for the change to be successful. (See Exhibit 1 above, Types of Change).
Changes needed: See Exhibit 3 above, Recommendations for Change at Factory A.

3. Briefly describe Russian culture. To what extent does the compensation policy proposed by the consultants fit with Russian culture and Slastyona's circumstances? (A case)

Hofstede's (2001) data indicate that Russia's culture is characterized by high Power Distance, high Uncertainty Avoidance, Masculinity, Individualism, and a Short-term orientation.

The consultants used a traditional job-based approach, which was similar to systems used by the majority shareholder and appropriate for Slastyona's circumstances and Russian culture. The compensation systems proposed was logical and easy to update for all the different regions (and pay markets) of Russia. However, additional changes are needed to support Factory A's growth, namely rewards for skill acquisition/ development (new hires and re-training existing people for new equipment), and pay for teams. (For specifics on the compensation policy, see above Learning Objectives: International HRM/ Compensation.)

4. Assess Wilton Winchester's capability to lead the changes needed (B case).

While Walker (the president) has a long term vision of the company, Wilton Winchester is neither visionary nor charismatic and appears deficient in some emotional intelligence competencies (see above, Assessment of Emotional Intelligence). Winchester's cognitive capability appears to correspond with Jaques' stratum IV, or perhaps even III. (See above, Assessment of Cognitive Capability).

5. Put yourself in the role of Slastyona's management consultants - what do you recommend to implement the proposed compensation system? (A case. B case for additional information).

See Epilogue above.

REFERENCES

Ashkanasy, N.M. & C.S. Daus (2005). Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated, *Journal of Organizational Behavior, 26*(4), 441-452.

Barsade, S.G., A.P. Brief & S.E. Spartano (2003). The affective revolution in organizational behavior: The emergence of a paradigm, in J. Greenberg (Ed.), *Organizational behavior: The state of the science* (pp. 3-52). Mahwah, NJ: Erlbaum.

Conte, J. (2005). A review and critique of emotional intelligence measures, *Journal of Organizational Behavior, 26*(4), 433-440.

Cherniss, C. & Goleman, D. (Eds.) (2001). *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations.* San Francisco: Jossey-Bass.

Elenkov, D.S. (1998). Can American concepts work in Russia? A cross-cultural comparative study, *California Management Review, 40*(4), 133-156.

Goleman, D. (1995). *Emotional intelligence.* New York: Bantam Books.

Goleman, D. (1998). *Working with emotional intelligence.* New York: Bantam Books.

Greer, C.R. (2001). *Strategic human resources management, 2nd Ed.* Upper Saddle River, NJ: Prentice Hall.

Hofstede, G.H. (2001). *Culture's consequences: comparing values, behaviors, institutions, and organizations across nations, 2nd Ed*. London: Sage.

Ivancevich, J.M. (2004). *Human resource management, 9th Ed.* Boston: McGraw-Hill Irwin.

Jaques, E. (1990). In praise of hierarchy, *Harvard Business Review, 68*(1), 127-134.

Jaques, E. (1998). *Requisite organization (amended).* Kingston, NY: Cason Hall.

Krishnan, R. (2001). Human resource practices and the bottom line in Russian subsidiaries, *Academy of Management Executive, 15*(4), 134-135

Landry, F.J. (2005). Some historical and scientific issues related to research on emotional intelligence," *Journal of Organizational Behavior, 26*(4), 411-424.

Locke, E.A. (2005). Why emotional intelligence is an invalid concept, *Journal of Organizational Behavior, 26*(4), 425-431.

McGuire, S. (2001). Introduction to managing organizational change, in *Managing organizational change: Selected readings* (pp. 1-8). Boston: Pearson.

Nadler, D.A. & M.L. Tushman (1989). Organizational frame bending: Principles for managing reorientation, *Academy of Management Executive*, *3*(3), 194-204.

Newman, K.L & Nollen, S.D. (1996). Culture and congruence: The fit between management practices and national culture, *Journal of International Business Studies*, 27(4), 753-780.

Salovey, P. & J.D. Mayer (1990). Emotional intelligence, *Imagination, cognition, and personality*, 9, 185-211.

Sashkin, M & M.G. Sashkin. (2002). *Leadership that matters: The critical factors for making a difference in people's lives and organizations' success*. San Francisco: Berrett-Koehler.

Sashkin, M. (1995). *The visionary leader: Leader behavior questionnaire* (Pamphlet). Amherst, MA: Human Resource Development Press.

PROCESS INNOVATION AT THE SANDY LUMBER MILL

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CASE DESCRIPTION

The primary subject matter of this case concerns the value of quality control and continual system improvement. Secondary issues examined include project implementation, and quality management issues. The case has a difficulty level appropriate for undergraduate seniors towards the end of a semester quality management class and for graduate students. The concepts presented in the class are not trivial and several hours during class can easily be used to discuss all issues. A student's degree of understanding of process control issues, financial analysis, and quality management issues dictate the amount of time out of class each will spend to address case issues. Most students will need to spend a minimum of four hours to address all issues.

CASE SYNOPSIS

The Sandy sawmill produced dimensional lumber. The mill had recently completed a $2.6 million process upgrade that had allowed it to improve yields and better match lumber produced to market conditions. Revenues had increased from $29,000,000 to over $40,000,000 as a result. But challenges and opportunities remained. The milling process was theoretically capable of producing closer to specification, and operators still had difficulty identifying where in the process defects originated. Further, the mill manager was somewhat overwhelmed by the amount of data being produced and how best to use this data. The case ends with the mill manager wondering what he should do next to get the most out of the new system. This case was designed for use in a quality management class to facilitate discussion of the design and implementation of a statistical process control systems.

INSTRUCTORS' NOTES

Introduction

The Sandy sawmill produced dimensional lumber from a variety of soft wood species. The softwood lumber industry was a competitive commodity industry – 14% of companies producing

in 1997 were no longer in business by 2004. The Sandy mill had remained competitive through sound management, process redesign, and continuous process improvement, but mill manager Tony Flagor knew more could be done. In particular, the sawmill process did not recover as many units of lumber from the raw log input as possible because lumber was initially cut larger than specification to reduce the risk of producing undersized product. At the time of the case, the mill has recently completed a $2.6 million process upgrade that has allowed the mill to reduce the extent of this overcut and better match lumber produced to market conditions. This upgrade has allowed the mill to increase revenues from $29,000,000 in 2002 to over $40,000,000 in 2004. But challenges and opportunities remained because of certain systems limitations. The milling process was capable of producing closer to specification, but could go out of control easily. In addition, the quality control process was such that out of control conditions were not noticed quickly and did not indicate which part of the milling process was out of control. Further, Tony was somewhat overwhelmed by the amount of data being produced and how best to use this data. The case ends with manager Tony Flagor wondering what he should do next to get the most out of the new system and how he might approach upper management for additional investment funds to address the systems perceived limitations.

Teaching Objectives

This case was written to facilitate discussion of the design and implementation of process control systems and the impact that such systems can have on the organization. Specific teaching objectives include:

- *Illustrate how improved processes and process control can provide an organization with significant cost savings in addition to enhanced quality, and illustrate how looking only at cost of quality can be used to justify investments in process control systems. The case includes numbers in it that allow students to calculate the cost of poor quality and determine the value of the process control system to the organization's bottom line, and then compare this to the cost of implementing the new system. There is also enough information in the case to determine total processes improvement return.*

- *Emphasize the importance of understanding inherent process variation and the ability to distinguish between product specifications and the natural tolerance limits of the process.*

- *Provide a context for discussing a number of issues related to the design of a control system, including what level of automated technology is appropriate, what and how much data to collect and store, how access to data is provided to those who need it, and how the design of the system impacts subsequent process improvement activities.*

- *Provide a basis for discussing the process of implementing new process control systems and technologies, with particular emphasis on the need to consider people issues in the implementation process. The case also provides a good vehicle for illustrating how a*

work design model (e.g., Hackman & Oldham's) can enhance a managers understanding of implementation issues.

- *Provide a context for discussing the appropriate use of information generated from a process control system, including whether and how such information might be used to evaluate employees and managers in the organization.*

Courses and Levels For Which the Case is Intended

This case was written for use in either an upper division undergraduate or MBA level course in Quality Management that includes discussion of statistical process control concepts. The case might also be used in an introductory level Operations Management course at the MBA level.

RESEARCH METHODOLOGY

The case describes a real company, real people, and a real situation, although the names of the company and manager have been changed at the request of the business. It was prepared based primarily on interviews with the company's mill manager. Some of the information for the case was also obtained through a review of some company documents and secondary research on the industry.

TEACHING SUGGESTIONS

Discussion of this case should follow four steps of cost benefit analysis: 1) what is the current situation, 2) what situation is desired, 3) how to implement or gain the desired situation, and 4) what is the benefit of gaining the new situation. To adequately address the first discussion question, students have to understand the state of the milling process in 2002, the state of that process after alterations, how the new milling and QC systems were implemented, and how much money the company saved by going to the new milling and QC systems. Question #2 asks students to evaluate the new state to determine if it is optimal, or if there is still a more desirable state to achieve. The third question deals specifically with implementation, that is, the effects of implementation. Effects include, job satisfaction, job design, and employee effectiveness. The last question asks the students to go through all four steps of the cost benefit analysis given the state of the processes at the end of the case. Students should develop a quality control policy they would like to implement, explain why they want to change the current policy, determine how much it would cost to implement the policy, what the policy would save the company, and how they would go about implementing the new policy.

DISCUSSION QUESTIONS

1. What is the value of the current milling process and automated process control system to the Sandy mill, just from the aspect of process control?

This question provides students the opportunity to consider the process capabilities of the mill and to quantify in dollars the costs of the allowed process variation both with and without the new quality control system. Appropriate process and market parameters are embedded throughout the case and allow the student to conduct a fairly thorough analysis of the situation. The necessary parameters are presented in Exhibit TN-1. Students will have to make some assumptions about an appropriate discount rate and a time horizon for their analysis. We have used 12% and 3 years in our calculations. The first step of the analysis is to calculate the cost of boards that were too big and too small produced by the pre 2002 production process. Presented in Exhibit TN-2 are steps taken and answers to calculations used to determine that the Sandy mill was losing about $6.145 million per year to off-sized boards. The information presented in Exhibit TN-3 show the steps taken to determine the loss if Tony had not installed the QC processes where the gain from overcut would only have been $668,671.79. By adding the QC process, Exhibit TN-4 shows the mill realized a gain of $1,285,105.35 from having nearly real time control of the process. By improving the QC process and achieving real time control, Exhibit TN-5 shows the mill could realize an additional gain of $1,011,955.95 or a total gain from controlling over cut on a real time bases of $2,297,061.30. Exhibit TN-6 shows that the current NPV of controlling overcut at the time of the case was just $.604 million, which is better than if no QC process had not been included in the original project where the NPV would have been a negative $.922 million. Yet if real time control of overcut had been installed with the original project, the Sandy mill could have realized a NPV for the project of $3,003,232.05.

There are several key points here to drive home with students. The first is that the limited process control capabilities, pre-2002, were costing the organization significant money relative to the new system ($1.285 million/year), and that basic cost of quality calculations provide a means of understanding the business implications of not having better processes and process control systems. The second key point to make is that the initial process automation and added QC system could be justified based entirely on quality savings (i.e., an NPV of $.604 million on an investment of $2.602 million). Additional savings are possible from labor savings, market advantages, increased speed, and the yield increases from more intelligent decisions of how to saw logs and boards. These gains are important both in emphasizing the impact that poor quality can have as well as in justifying Tony's position that the automation did not need to lead to layoffs for it to be effective. The third key point to emphasize is that the subsequent possible investment in the board route ID and

automatic process control system, which provided better real time process tracking and adjusting capability, would deliver the biggest bang for the buck – an additional $2.399 million in NPV on an investment of $140,000! This is a huge payback and illustrates the potential value of having the right data and controls with which to manage the process.

2. Are mill operators utilizing the current milling and QC systems optimally?

Students should have recognized from the first question that both the milling and QC systems have had a very positive impact on the organization, and the improvements resulting from the systems have clearly justified the cost of the systems. However, the gains realized from implementing the systems do not indicate that the systems are being utilized optimally. There seem to be two significant areas where the QC system utilization is sub-optimal, which in turn causes the milling system to be operated sub-optimal.

The first significant limitation of the system relates to how the data being generated is being used – the system seems to be used primarily to detect when the process has changed sufficiently as to be causing defective product rather than to detect when the process has gone out of control. The description in the case makes clear that the QC system raises red flags for the workers when measurements exceed product specifications. From a quality management standpoint, the QC system ideally should be used to indicate when the process has shifted (or gone out of control), regardless of whether this leads to out of specification product or not. It appears that some, but not all, production supervisors are sensitive to this issue, as the case mentions that some supervisors were at times using the graphical output to detect system drift and act on it prior to a computer generated alert. However, use of the system in this way appears haphazard and driven by no standard protocol. This situation provides a good opportunity to hammer home the difference for students between the ideas of specification limits and control limits, concepts that students routinely confuse (particularly undergraduate students). What is particularly powerful about this example is that students can put a dollar value on shifts in the process that remain within the specification limits – the case indicates that every 1/1000 of an inch system drift can cost the company approximately $20,302.00 per year. Students often fail to see the point in correcting an out of control process that doesn't produce defective product, in part because it is difficult to put a cost on being out of control but within specifications. This case illustrates that a shifting process, even if it still produces products entirely within specifications, has very real costs.

Two additional teaching points can also be built into the preceding discussion of control versus specification limits and the proper use of the system to understand the inherent process variation. First, the circumstances in the case allows the instructor to make the point that the quality control system needs to be used in a consistent manner. The current

situation of having some supervisors using the graphical output to try to detect process shifts, with no standard protocol and no apparent statistical foundation to their decision making, could easily contribute to increased process variability. Tony clearly needs to establish a consistent, and statistically valid protocol for the use of this graphical data. And second, Tony's contemplation of whether or not to use the data in some way to evaluate the effectiveness of operations on a given shift raises an interesting question about the appropriate uses of process control data. Certainly, Deming would argue against the use of system data toward such uses, first because it runs the risk of evaluating people based on random process variation, and second because it may cause supervisors to view the process control system in a negative way. Clearly neither of these would be desirable results. However, a review of the QC system data can reveal whether the supervisor is using the QC system appropriately to manage the milling process. At least initially, Tony would want to focus any use of the data in this way on identifying developmental/training needs of each supervisor, as opposed to making a formal part of a supervisor's evaluation system to avoid a potential backlash against the QC system.

The second significant limitation of the system relates to the design of the system and what specific information is being obtained – the limitation stems from the fact that the design of the current QC system stops short of allowing easy detection of where the milling process is out of control when it does go out of control. Because boards from different saws are mixed, and because there is no system for marking or tracking individual boards so that they can be traced back to particular saws, detection of a change in the milling process requires workers to hunt for which part of the milling process (i.e., which saw) is causing the problem. This confusion entails the workers watching each sawing step individually, pulling off a number of boards from that step, and measuring the boards. All the time this is going on, the milling process is continuing to produce sub-optimal boards and costing the company money. Once the problem source is identified, the worker can then shut down the milling process and begin to try to understand why the milling process went out of control. This situation allows for a discussion of the value of thinking about problem identification at the time the process control system is being designed. One option that is available to Tony to improve this situation is the installation of additional scanners at other points in the process or the use of a system to mark boards as they come through the milling system, as well as automatically adjusting machinery at critical tasks. Discussion of these options is probably best postponed till the latter part of the case discussion.

The material in Exhibit TN-4 indicates that the new milling and QC systems are still producing $4.86 million of boards that are either too big or too small. Because mill operators are not able to tell where an off size board comes from and from continual operation of the milling system while the operator determines the process is producing off size product and fixes the problem, too many off size boards are being produced.

Finally, it is worth having a discussion about just how much data the QC system can potentially generate and whether any of this data holds unrealized value for Sandy. Clearly, the QC system has the capability of creating vast amounts of data, and one of the challenges of the automated data collection technologies is converting all of this raw data into useful information and knowledge for the firm. It is interesting to point out to students that in some sense, Tony has both too much and not enough data. The system produces up to 1920 measurements per second (one 10 foot board with a depth width measure every 1/8 of and inch), yet Tony does not have enough data in that he cannot identify where the milling process has gone out of control. The fact that so much data already exists may make it difficult for Tony to convince upper management that more money should be spent to collect additional data. In addition, it is unclear whether full value is being realized by the huge quantity of data already being collected. Instructors may find it useful to link this discussion to section 4 of the Baldrige quality award criteria on Measurement, Analysis and Knowledge Management. In one sense, measurement, analysis and knowledge management really are at the center of the challenge that Tony faces. Section 4.1.a.1 of the Baldrige award, for example, opens by asking respondents how they "select, collect, align and integrate data and information for tracking daily operations and for tracking overall organizational performance." Section 4.2 goes on to ask about how organizations "ensures the quality and availability of needed data and information for employees . . ." These are exactly the questions that Tony is wrestling with, and it is worth emphasizing to students the need for managers to constantly work toward improving information management processes.

3. Evaluate how well Tony has implemented the current systems. What has been the impact of the new systems on workers jobs? How did Tony's management of the implementation of the systems account for the affect that the systems had on job design at Sandy?

This question provides a good opportunity to discuss the affect that automated process control technology can have on line employees, and how a well planned implementation can help make this change a positive one. Hackman and Oldham's (1980) work design model, which appears in some quality management textbooks, provides a good theoretical framework with which to look at how the changes implemented at the mill influenced workers. Exhibit TN-7 shows the work design model along with notes on the influence of the new milling and QC systems. One can see from this exhibit that the overall impact of the new systems is positive on workers jobs – according to the model it should have contributed to higher internal work motivation, higher job satisfaction, and higher work effectiveness.

Once this model has been discussed and students understand that the impact of the change, theoretically, should have been positive on workers, students can then be asked whether or not they think such a change will always have a positive impact 'in the real world'. From here, the discussion can segue into the critical role that implementation played in realizing the benefits of this change on workers at the Sandy mill.

The instructor might start by discussing the moderators included in the Hackman and Oldham model – specifically workers' knowledge and skills and their need for growth. In implementing the system, Tony put significant effort into providing training for the workers and into building the case for why the change was needed. These are both critical elements in the implementation of any major organizational change. They also directly impact the moderating variables in the model. Given the characteristics of the workforce at the mill, it is clear that workers initially lacked the skills to use and benefit from the system. Had Tony not provided training, the change would have almost certainly had the opposite affect on worker motivation, satisfaction and effectiveness. Additionally, students can logically conclude that workers' need for growth was probably somewhat low. In many cases, workers were second or third generation mill workers. Many probably grew up in this small rural town simply expecting to work in the mill – to learn the craft, put in their time at the mill, and live a rural lifestyle. The young people in the community with significant need for growth probably routinely left the community in search of that growth. This characteristic of the workforce would have been an added challenge for Tony's efforts to implement the job change.

Tony's solution to the implementation impediment of liking the status quo and other impediments such as fear and/or mistrust of the unknown, and fear of losing employment (McNamara, 1999) was multifaceted. Tony convinced the workers that they needed to grow in order to maintain what they had by showing them that if they wanted to continue to prosper in the small rural community and if they wanted there to be jobs for their children at the mill, that they needed to grow. The alternative to growth would be the closure of the mill due to the increasingly competitive environment that the company faced.

Other key elements of the implementation can also be raised at this point. Tony guaranteed workers that no one would be laid off as a result of the changes being made at the mill. This guarantee was likely a hard sell to Tony's managers given the competitive nature of the industry, but was critical to getting workers' support for the changes. Additionally, Tony worked hard to involve all of his workers in the design and implementation of the changes, again in an effort to achieve buy-in from the workers and to insure a system that was compatible with the capabilities of the current workforce. As suggested by McNamara (1999), Tony also kept the communication channels open about any changes to the plan and encouraged recommendations about how the plan could be improved all the way through implementation.

In addition to the Oldham model, instructors may want to utilize the thirteen guidelines to organizational change recommended by McNamara (1999) to discuss the merits of how Tony managed implementation of the new production and quality control systems. A detailed evaluation of Tony's actions in comparison to McNamara's guidelines is shown in exhibit TN-8.

4. What should Tony do next with respect to the process control system and what affect will what he does have on the milling process?

In questions one and two students should have determined the state of the current QC system and what needs to be done to correct the system. In the answer to this last question, the students have the opportunity to utilize the design for six sigma tools to determine how much it will cost to change the QC system and what the projected savings would be from the changes they recommend. Furthermore, students have the chance to address how to convince management a project is a good project and how to get employee buy-in to the additional changes. Material presented in Exhibits TN-5 and TN-6 show steps used to calculate an expected NPV when the costs of determining which of the saws a board comes from and installing automatic process adjusting devices at each of the twelve problem areas is added to the proceeding process changes. The NPV for the total project would then be $3.003 million. The quality control process should then be built around process capability. The mean overcut and the range of the overcut should be used to determine the upper and lower control limits on X-bar and R charts. The mean and range should be determined from random sampling. Once the limits of the processing system are determined, the QC system should consist of an automated system that has been programmed to scan data for statistically significant process shifts in variation and amount of overcut. When such a shift has been detected, the milling process should adjust automatically as appropriate. Mean and range should be determined randomly and graphed on control charts for benchmarking purposes. Attribute data charts could also be utilized to determine if the frequency of off sized boards was changing. Twenty minutes of production would produce about 1320 boards with 3 to 4 boards beyond plus or minus three standard deviations thus; defects per 20 minutes of production could be graphed for benchmarking purposes. Tony also needs to work to formalize how supervisors use this information to insure better and more consistent use of the quality information generated. An additional round of training seems in order for both supervisors and operators.

REFERENCES

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.

McNamara, Carter, (1999). *Basic Context for Organizational Change.* Management Assistance Program for Nonprofits. Retrieved June 2, 2004, from http://www.mapnp.org/library/mgmnt/orgchnge.htm#anchor494556.

Exhibit TN-1: Process Parameters Needed to Calculate NPV of Changes to the Milling and Quality Control Systems from the Perspective of Improved Process Control

Process Parameters		
Width	Depth	
0.35	0.21	inches of average overcut pre milling system conversion
0.11	0.075	standard deviation in inches of overcut pre milling system conversion
0.006	0.006	average inches of overcut needed so lumber will shrink to correct depth and width
$0.347	$0.347	market value in dollars of one board foot pre system change
$0.372	$0.372	market value in dollars of one board foot after system change
0.67	0.67	number of lineal feet in one board foot of 2X4
85000000	85000000	board feet produced in 2002
1522388060	1522388060	lineal inches of 2 X 4 produced in 2002
116,500,000	116,500,000	board feet produced post system change
11.76%	11.76%	Increase in yield due to overcut and sawing decisions post system change (95%-85%)/85%
$0.02	$0.02	penalty per board foot in dollars if product is under specification
$2,600,000.00	$2,600,000.00	cost in dollars to convert milling system
$20,000.00	$20,000.00	costs in dollars for two QC scanners (2 $10,000 scanners)
$140,000.00	$140,000.00	cost in dollars to further improve QC system (12 auto adjusters, ID system, Software)
0.32	0.18	overcut in inches after initial milling system change
0.099	0.059	standard deviation in inches of overcut post milling system conversion
0.29	0.156	overcut in inches after QC1 change
0.09	0.05	standard deviation in inches of overcut post QC1 implementation
0.23	0.136	minimum overcut expected after additional changes in QC system
0.057	0.026	standard deviation in inches of overcut after additional changes in QC system
3.85	1.71	dimension of 2 X 4 after production pre system change

Exhibit TN-1: Process Parameters Needed to Calculate NPV of Changes to the Milling and Quality Control Systems from the Perspective of Improved Process Control		
Process Parameters		
Width	Depth	
3.82	1.68	dimension of 2 X 4 after production post system change pre QC1 system
3.79	1.65	dimension of 2 X 4 after production post system change post QC1 system
3.73	1.636	expected dimensions of 2 X 4 after production post system change and 2nd QCchange
12%	12%	APR or cost of capitol
0.01	0.01	equal monthly percentage rate as decimal
12	12	number of accrual periods within one year
3	3	number of years project should be analyzed
36	36	number of periods in NPV equation
30.10750504	30.10750504	PV multiplier

Exhibit TN-2: Costs of Being Under and Over Sized Pre Milling Process Conversion		
Width	Depth	
3.127272727	2.72	z value from .006" overcut to mean overcut of .35" & .21" overcut with SD equals .11" and .075"
0.000882166	0.003264148	proportion production under the normal curve that would be too small
$1,499.68	$5,549.05	cost in dollars incurred for boards being too small
0.998235668	0.993471705	proportion of area where production will average .35 & .21 overcut after taking equal tails of distribution off
0.694	0.414	upper bound for area with average size of .35 & .210
0.0002394	0.0009927	conversion to determine average size of a given area under the normal curve for Z of 3.1273 and 2.72
0.694026334	0.414074453	average overcut of those boards over .694" & .414" overcut
0.344	0.204	average overcut sans shrinkage of .998 and .9935 proportion of production
0.688026334	0.408074453	average overcut sans shrinkage of .000882 and .00326 proportion of production
14001742.24	3687989.468	extra board feet per year in boards due to overcut
$4,858,604.56	$1,279,732.35	cost to overcut per year pre system change.
$6,145,385.64		total cost per year of variation in board dimensions pre system change

Exhibit TN-3: Costs of Being Under and Over Sized Post Milling Process Conversion but pre fist scanners for QC system		
Width	Depth	
3.171717172	2.949152542	z value from .006" to mean of .32" & .18" overcut with SD of .099 & .059
0.000757768	0.001593302	proportion production under the normal curve that would be too small
1288.2056	2708.6134	cost in dollars incurred for boards being too small
0.998484464	0.996813396	proportion of area where production will average .32 & .18 overcut after taking equal tails of distribution off
0.634	0.354	upper bound for area with average size of .32 & .18
0.0002068	0.0004553	conversion to determine average size of a given area under the normal curve for Z of 3.17172 and 2.9492
0.634020473	0.354026863	average overcut of those boards over .634" & .354" overcut
0.314	0.174	average overcut sans shrinkage of .9985 and .9968 proportion of production
0.628020473	0.348026863	average overcut sans shrinkage of .000758 and .00159 proportion of production
12681070.28	3090448.521	extra board feet per year in boards due to overcut
$4,400,331.39	$1,072,385.64	cost per year to overcut pre system change.
$5,476,713.84		total cost per year of variation in board dimensions post system change but pre first scanners for QC system

Exhibit TN-4: Costs of Being Under and Over Sized Post Milling and Scanner Installation for Quality Control Process		
3.155555556	3	z value from .006" to mean of .29" & .156" overcut with SD of .09 & .05
0.00080103	0.001349967	proportion production under the normal curve that would be too small
$1,361.75	$2,294.94	cost in dollars incurred for boards being too small
0.99839794	0.997300066	proportion of area where production will average .29 & .156 overcut after taking equal tails of distribution off
0.574	0.306	upper bound for area with average size of .29 & .156
0.0002145	0.0003819	conversion to determine average size of a given area under the normal curve for Z of 3.1556 and 3

Exhibit TN-4: Costs of Being Under and Over Sized Post Milling and Scanner Installation for Quality Control Process		
0.574019305	0.306019095	average overcut of those boards over .574" & .306" overcut
0.284	0.15	average overcut sans shrinkage of .9984 and .9973 proportion of production
0.568019305	0.300019095	average overcut sans shrinkage of .000801 and .00135 proportion of production
11379428.48	2616604.927	extra board feet per year in boards due to overcut
$3,948,661.68	$907,961.91	cost per year to overcut pre system change.
$4,860,280.29		total cost per year of variation in board dimensions post system change and first scanners for QC system

Exhibit TN-5: Expected costs per year of Being Under and Over Sized Post total Quality Control Process		
2.98245614	2.923076923	z value from .006" to mean of .23" & .136" overcut with SD of .057 & .026
0.001429797	0.001733022	proportion production under the normal curve that would be too small
$2,430.65	$2,946.14	cost in dollars incurred for boards being too small
0.997140406	0.996533956	proportion of area where production will average .23 & .136 overcut after taking equal tails of distribution off
0.4	0.212	upper bound for area with average size of .23 & .136
0.0004099	0.0005053	conversion to determine average size of a given area under the normal curve for Z of 2.9825 and 2.9231
0.400023364	0.136013138	average overcut of those boards over .400" & .212" overcut
0.224	0.13	average overcut sans shrinkage of .9971 and .9965 proportion of production
0.394023364	0.130013138	average overcut sans shrinkage of .00143 and .001733 proportion of production
8830190.481	2244586.311	extra board feet per year in boards due to overcut
$3,064,076.10	$778,871.45	cost per year to overcut pre system change.
$3,848,324.34		expected total cost per year of variation in board dimensions post system change and total QC system implementation

EXHIBIT TN-6 NPV for Overcut Control and from all other Sources						
	Cost of waste pre change	Cost of waste post change if had not added QC1	Cost of waste post QC1 change	Expected cost of waste post proposed QC2 change		
	$6,145,385.64	$5,476,713.84	$4,860,280.29	$3,848,324.34		
	Relative to preceding scenario	Relative to pre system change	Cost of System Change	NPV for just project	NPV relative to pre change	Increased Yield MMBF
PMT project	$55,722.65	$55,722.65	$2,600,000.00	$(922,330.05)	$(922,330.05)	1927.008049
PMT project + QC1	$51,369.46	$107,092.11	$20,000.00	$1,526,606.36	$604,276.31	3703.473625
PMT project + QC1&2	$84,329.66	$19,1421.77	$140,000.00	$2,398,955.73	$3,003,232.05	6619.773188
Yearly increase from rest of project						
Yearly increase form yield savings from controlled and reduced overcut $5.477M - $4.860M.						$1,285,105.35
Yearly increase from market gain on yield increase from overcut ($.025/board ft. * 3703474)						$92,586.84
Yearly increase from ability to be flexible relative to the market ($.025/board ft * 85000000)						$2,125,000.00
Yearly increase from increased speed of milling + market gain (30500000 * $.372/board ft * .6683). Total increase is 116500-85000/85000 = 35.47% 11.75% from yield increase and 23.71% from speed increase so 66.83% of the total increase is from speed increase and 33.17% from yield increase.						$7831139.40
Yearly yield increase from increased effectiveness of log and board sawing decisions. Of the 33.17% increase from yield increase 63.393% was due to cutting decisions. ($.372/board ft. * .3317 * .6339 * 30500000)						$2,509,168.41
Yearly increase from labor savings from one less employee						$100,000.00
Total Yearly Gain						$1,394,3000.00
Went from yearly income of $29495000.00 to $43438000.00 for a total yearly gain of ($43438000.00 - $29842000.00)						$13,943,000.00
Total NPV for all projects would be $32362411.89. Equals $13943000.00/12 times PV multiplier from TN-1 minus costs of $2.6 million and $140000.00.						

Exhibit TN-7: Impact of Process Control System on Job Design Using the Hackman and Oldham Job Design Model

	Core Job Characteristics	Critical Psychological States	Outcomes of Three Preceding Constructs on Constructs Below
Skill variety increase, as new jobs require computer literacy, greater troubleshooting ability, and statistical thinking.	Skill Variety		
Task identity increases, as the new jobs are about managing the entire process, as opposed to the previous focus on individual boards.	Task Identity	Skill Variety, Task Identity and Task Significance combine to form 'Experienced meaningfulness of work'. This construct increased.	High internal work motivation
Task significance increases, as the new focus is on wood flow, which workers come to realize determines long-run viability of the mill.	Task Significance		High growth satisfaction High general job satisfaction High work effectiveness
Little impact on autonomy	Autonomy	Experienced responsibility for outcomes of the work. This construct remained unchanged..	All four of the above constructs increased as a result of the new process control system
Feedback increases, as continuous data collection provides opportunity for real time feedback on wood conversionrate that contributes to company profits.	Feedback.	Knowledge of the actual results of the work activity. This construct increased	
Relationships moderated by workers skills, knowledge, and need for growth			

Exhibit TN-8: An Evaluation of Tony's Approach to Implementation Using McNamara's Guidelines for System Change	
Guideline:	Hire consultants
Action by Tony:	Tony did not employ independent consultants. He did consult with upper management and some industry experts, and got help from his suppliers.
Result:	Consultation with upper management smoothed the transition to new system. There is no evidence that the actual implementation process was compromised by not employing consultants, but it is possible that some of the system design challenges Tony is facing may have been avoided had a consultant been employed at the design phase of the project.
Guideline:	Communicate need to change
Action by Tony:	Tony worked closely with employees and suppliers. He built a strong case for the need to change, based on the highly competitive industry situation, the strong timber tradition in the community, and the employees' desires to live and work in the small, rural town in which the mill was located. He then presented this case to all employees at a company-wide meeting. Then Tony held numerous smaller meetings with his employees until he convinced everyone that the current system was inadequate.
Result:	Employees overcame their reservations about change and assumed ownership of the new system.
Guideline:	Encourage feedback from employees
Action by Tony:	Tony asked employees how they thought they should proceed, and required employee input throughout the process. The case indicates that this was not typical for the company.
Result:.	Employee involvement led to employee ownership of the new system. Tony's breaking with company culture and asking for employee input contributed to employees willingness to trust Tony and embrace the necessary changes
Guideline:	Know the goals of the project and stay with those goals
Action by Tony:	Tony provided very specific project goals: to reduce the overcut by .06" to increase the board feet of lumber recovered to log board feet bought to 95%, and to increase the per thousand value a minimum of $30 per thousand board feet. Tony stuck with these goals throughout the project.
Result:	Employees had a clear understanding of what needed to be accomplished. Sticking with these goals kept the process on track and helped drive system changes.
Guideline:	Plan the change so goals are reached with a designated person in charge of the project
Action by Tony:	Change was initiated planned and overseen by Tony.
Results:	Employees experienced consistency of leadership over the project, providing time for them to develop some level of trust in that leadership. This trust contributed to a smooth and successful transition to the new system.
Guideline:	Everyone knows their duties and who they report to

Exhibit TN-8: An Evaluation of Tony's Approach to Implementation Using McNamara's Guidelines for System Change	
Action by Tony:	The case does not provide detailed descriptions of the different employees, but the case narrative suggests the duties were well delineated with all employees ultimately reporting to Tony. The case does indicate that duties changed, both because the employees were working with new technologies and because there were fewer employees. Employees were involved in the process of job redefinition.
Result:	Smooth transition – clearly defining the new duties (and providing guarantees that nobody will be laid off as a result of the change) reduces the ambiguity experienced by the employees, helping them overcome their fear of change.
Guidelines:	Delegation of duties and responsibilities
Action by Tony:	While the case does not explicitly state that duties were delegated to employees – there are numerous points in the case that do point to the involvement of everyone and a true team effort.
Results:	Saw sharpening solutions and QC problems were found.
Guidelines:	Project will take longer than planned, expect it
Action by Tony:	Tony planned on a given amount of time to complete the project. There is no evidence in the case one way or the other on whether Tony expected the project to take longer.
Results:	Original install did not take more time, but learning how to get the most out of it did. Tony is now concerned about returning to upper management to request more resources (with money being a bigger concern), despite the fact that the additional resources needed are relatively minimal compared to the $2.6 million initial installation. This would seem to imply that Tony expected the project to be done the first time around, and that he might not have prepared his managers for follow-up fine-tuning of the system.
Guideline:	Focus on the needs of customers
Action by Tony:	The whole design was to enable responsiveness to meet customers changing needs quickly, profitably and more cost effectively.
Results:	The case states that the new system "helped the mill become more market driven as the decisions on how to cut the logs and boards was transferred from operators to sophisticated computer software." This enabled the mill to produce those boards that were in greatest demand, reinforcing to employees and upper management the value of the changes made. During the implementation, it would have allowed Tony to justify the changes not just based on the long term survival of the facility, but also on the short and long term gains for the company's customers.
Guideline:	Manage change, do not try to prevent it
Action by Tony:	Tony embraced change, and he convinced his employees to do the same.
Results:	Change went smoothly
Guideline:	Those involved in change must take care of themselves

Exhibit TN-8: An Evaluation of Tony's Approach to Implementation Using McNamara's Guidelines for System Change	
Action by Tony:	Tony emphasized maintaining a healthy balance between work and non-work – both for himself (e.g., the case states he went biking, skiing, and spent time with his family to cope with the stress of the effort) and for his employees.
Results:	Maintaining this balance helped Tony and his team complete a stressful project implementation without any real evidence of burnout. This should pay dividends as Tony moves forward – he has shown his employees that change can be accomplished while maintaining a healthy balance between work and non-work. This is an important step in motivating employees to embrace continuous improvement, which the case makes clear is critical given the competitiveness of the lumber industry.
Guideline:	Include closure to plan
Action by Tony:	The case indicates that Tony and his employees recognized their accomplishments, but also recognized some short comings of the system. While the case indicates that after quick additions to the original process, the team met most of their initial goals, there was no information provided as to how Tony marked closure of this part of the project.
Results:	Employees have had a chance to see what they can accomplish, and have been able to take pride in their involvement. As a result, they may be more receptive to the instigation of mini projects to capitalize fully on the larger project. It may be interesting to debate with students how to balance "closure" with "continuous improvement". The challenge facing any manager at the end of a project is how to celebrate the success while at the same time preparing employees for the next improvement project.
Guideline:	Recognize new organizational structure due to system change
Action by Tony:	Eliminated and redefined job descriptions and duties to meet system requirements. Adjusted support systems (e.g., training) to match this new structure.
Results:	The results were effective production due to leaner production. Because the new structure generally gave employees greater responsibilities, it demonstrated that company managers had confidence (or trust) in their current workforce and were willing to invest in them for the future. This confidence should build greater loyalty and trust among employees, which should have payback down the road for the firm.

COPING WITH TRANSITION: FROM DOCTORAL RESEARCH TO TEACHING AND FROM CORPORATE TO ENTREPRENEURIAL FINANCE

Charles R. B. Stowe, Sam Houston State University
Robert Stretcher, Sam Houston State University

CASE DESCRIPTION

The primary subject matter for this case concerns the re-thinking of teaching methods and strategies in shifting from a doctoral research orientation to one of teaching emphasis, and from a typical business school orientation in financial management and business strategy to a more directed approach toward entrepreneurial finance. The case has a difficulty level appropriate for an exercise for business school professors faced with this particular challenge, as well as for PhD graduates coming into an environment where innovative and deeper pedagogical thought is necessary. The case is designed to be used in a seminar setting and should take no more than one hour for a seminar exercise, less if the case is available in advance for reading purposes.

CASE SYNOPSIS

Richard LeMont, a recent graduate of a Midwestern university with a Ph.D degree in Finance with a minor in Strategy/Policy, is faced with teaching a course in entrepreneurial finance at an AACSB-accredited College of Business. His doctoral training, while preparing him to deal with research and typical business school courses, has failed him where the entrepreneurial course is concerned. The reader is tasked with developing solutions to the problems highlighted by his first four weeks of the course.

INSTRUCTORS' NOTES

Suggested Use

This case really combines two different issues. Richard is a typical newly minted Ph.D whose enthusiasm for his topic meets the reality that his students may not share his enthusiasm. He discovers that this generation of 18-20 year olds has a different perspective on college education.

Most see college as a degree with each course as a meal that can be eaten quickly to allow them to devote time to go to work to pay for college and their social life. The current generation has been empowered regarding their education through the faculty evaluation system. In some institutions where students learn that they can do significant damage to a professor's reputation and career, there may exist an air of extortion. At institutions where student evaluations are an insignificant part of the formal teaching evaluation process, students are aware that they have been described as "customers" and often behave accordingly. Second, the case deals with the difference in approaches between the typical financial management (corporate finance) course and the entrepreneurial finance course. The two issues are obviously intertwined, and the link created a dynamic situation useful for review by professors and by doctoral students expecting to enter the teaching profession.

This case may be used to explore the difference between pedagogy and andragogy. College students aged between 18 and 21 demand more than a repeat of high school. On the other hand, they lack the depth of life and work experiences effective for adult learners. The challenge for college professors is what teaching strategies they should use to bridge adolescence and more experienced adults. This case offers an opportunity to explore the problems of dealing with college students who are resistant to learning by memorization but lack the experience that are required to make a connection between the substance of what they are learning with the application. Effective teaching at the college level requires that professors use strategies to motivate students. Students need to see value of the material and its application to the real world even when they lack experiences to make a strong connection as to the utility of what they are supposed to learn. This case offers some strategies for professors to consider in helping students experience and learn concurrently.

Within the context of finance, this case offers insight into the substantive differences between the common or business core course in corporate finance and a course in entrepreneurial finance. For a student completing a finance degree who might take an entry level position in a financial institution, the corporate finance course offers an intellectual suitcase of finance skills that a student would encounter in a large organization. Some finance students will obtain employment in the marketing end of finance such as working as a stockbroker, or in life insurance, pension or health insurance sales. Others may find entry level positions in the treasury, controller or budgeting division of a medium to large enterprise. The content of an entrepreneurial finance course may be oriented toward an individual who will join either a family-operated business or an entrepreneurial venture in its start up or development phase. This individual will more likely not be employed on a full time basis as a financial officer, but will find themselves in a more generalized management position involving a broader range of responsibilities. This case helps finance professors explore the differences between a corporate finance course and an entrepreneurial finance course including objectives, substantive tools, and examples used to illustrate the use of financial formulas.

DISCUSSION QUESTIONS

1. What should Richard do with the results of the first exam? Among the alternatives, p-please discuss the merits and shortfalls of the following:

a. Should Richard simply ignore the results - pass out the grades and continue on?

While perhaps tempting, Richard should not simply pass out the grades with no comment and proceed onward with the course as though there is nothing out of the ordinary. Such a tactic would probably result in lots of complaints to his department chair.

b. Should Richard give a 40 point curve to get the average grade to a 75?

However, simply granting a 40 point curve would be equivalent to ignoring that there is a substantial gap between expectations and student performance. Professors should debate intermediate steps of acknowledging the gap and attempting to close it in a way that maintains some academic integrity.

c. Should Richard offer points for students who take the first exam and look up the correct answers citing their text?

Rather than lecturing on the solutions to each question, the professor might want to consider announcing that students could add to their scores by taking the exam home and looking up the answers, and by writing a brief statement as to why they missed that particular question. Their second open-book, open note attempt would be worth 100 points and their explanations of where they were confused might be worth another 25 points for a total of 125 points. Taking the potential 125 points and the total score on their first exam and dividing by 2 would give them their final first exam grade. This exercise might help them make the connection between what they forgot and what they are supposed to learn in the entrepreneurial class. The disadvantage to this strategy is that Richard might have to alter his schedule of readings and future exams.

d. Should Richard merely drop the first exam entirely and retest at a later date?

This strategy might result in a repeat performance or worse it might result in an attempt by some students to merely memorize the correct answers without comprehending the material. Such a strategy confirms in the students' minds that the professor is acknowledging that the test or the professor were somehow deficient. The problem is that

that the students who need to most remedial review might be too discouraged to face another exam. On the other hand if this were accompanied by review sessions, instructor created handouts, then students might respond more favorably. The problem with this approach is that Richard might be accepting responsibility for the outcome instead of having the students understand their role in creating a favorable learning outcome. A discussion of this strategy should lead into a discussion of alternatives aimed at giving students an opportunity to demonstrate their mastery of the subject.

e. Should Richard express his empathy toward his students but continue on with the course with no grade adjustments and tell them that the will do better on the next exam?

Given the level of student angst, this strategy might be interpreted as showing indifference to student concerns. This suggestion should provoke discussion on how professors can show empathy while maintaining the academic integrity of the course and stimulate positive student commitment to reading the book, doing homework and more actively participating in class. This is a really tall order given Richard's current experience. The fact that Richard conducted a re-examination of his basic assumptions toward his students, the course and his expectations is a positive step. However, his actions and communications with students need to reflect his commitment to a positive outcome. However, if Richard drops the first exam without making any other changes, student frustration is likely to continue.

2. What actions should Richard take with respect to the material he intended to present? Should he reduce his expectations and stretch out the semester?

Clearly, continuing on with his lecture style would be a mistake. Richard now understands that without some constructive feedback from his class, he could well continue on lecturing and students would continue their passivity. There is evidence to suggest that the students are not reading their text or working problems. Richard might want to conduct 'workshops' in class where students would team up to solve a home work problem in class. While this might slow down the pace somewhat, Richard could encourage students to help each other in class. Students working in small groups might actually ask more questions during informal workshops than during lectures. Observing students working on problems would give the professor an opportunity to identify holes in their learning. Knowing that the students lack related accounting and corporate finance text books, he might also consider extracting a couple of pages from their accounting and finance textbooks (in strict compliance with the fair use doctrine to avoid copyright infringement). Another strategy

would be to assign a graduate student to summarize helpful review materials from their old textbooks. Giving students handout materials from their old textbooks might help them see the relevance of material they previously studied and how those concepts apply to different circumstances (for example, financial analysis applied to smaller firms versus larger ones). Giving students handouts and using class time to allow them to do problems might encourage some active learning. The workshops provide an excellent excuse to demand that students at least bring their texts to school not to mention possibly reading them! Another approach would be to invite a professor who currently teachings accounting or the corporate finance course to step in a for a brief review lecture of major terms or concepts. Then Richard could pick up with how these concepts apply to small firms or entrepreneurial ventures.

3. Given Richard's need to spend time on his research, should he simply post the instructor's test questions so that students could more easily prepare for the exams instead of changing his teaching approach so that he would not have to rework his lectures?

While some professors use this tactic of posting exam questions and answers, the word would probably get to the department chair who might not appreciate this strategy. This strategy also fails to address an obvious problem with the professor's lectures and the willingness of the class to actively participate in the learning process.

4. Should Richard inform the class that they need to review the basics of accounting, algebra, and finance on their own if they are confused about these basic concepts?

Informing the class that they need to review the basics of accounting, algebra and finance may well aggravate the situation. While the class should have learned this material, they haven't and telling them to review is only going to enlarge the gap between Richard and his students. A better strategy is for Richard to acknowledge that students may not have made the connection with prior material or that the prior concepts are difficult to retain when they are not actively working in accounting or finance. As previously suggested, Richard might want to pass out review sheets, put the texts on reserve, offer additional tutoring, or invite their former professor of finance or accounting to provide a short session on key concepts repeated by the entrepreneurial finance text. This would allow Richard to discuss the concepts in the context of entrepreneurial finance and subtly show students how courses are, in fact, integrated and related to each other.

5. What strategies should Richard take toward the substance of his future lectures?

One suggestion worth exploring is whether Richard should develop a list of questions to ask students at the beginning of the class that do not require a knowledge of what is in the text, but that stimulates discussion. For example, if the text gave an example of using forecasting methods to compute AFN (additional funds needed) for a particular industry, he might want to ask how many students are familiar with that particular industry or one similar. Or, he might ask why a company might bother with computing AFN to begin with. Or, he might ask whether students in managing their own finances ever stop to work out a monthly budget and whether the budget actually changes from month to month.

He may decide to use respond pad technology if he is using PowerPoint presentations to engage students to respond to specific questions to test whether the group is actually following along. Or he may use quizzes (that do not count) and give an award to the student with the highest quiz grade! That might stimulate more active feedback.

6. How much time should Richard devote to this course as opposed to his research?

This question should lead to an interesting discussion of trade offs. Most experienced professors have developed outlines and teaching notes that make the repetition of the same course easier than when they first prepped for it. On the other hand, students are quick to resent being read to or receiving information that is clearly dated. Prep time does compete with research time and in most AACSB institutions, research is the sword to die on, not teaching in spite of the so-called teaching mission. It is well understood within higher education that job mobility depends on having a solid publication record. Most institutions recognize that during the first semester for inexperienced professors, the organization, preparation, and administration of tests, papers, etc is going to take time away from research. Ignoring the problem could be catastrophic for Richard as most institutions are tuition-driven and don't want to tenure a professor that cannot attract or at least retain students. So, there is some utility in properly prepping a course which includes selection and application of the right mix of teaching strategies.

7. What lessons are there for Richard's department chair in making teaching assignments for entrepreneurial finance?

Given the significant differences between corporate finance and entrepreneurial finance which are highlighted in the case, Richard's department chair should consider that the amount of course preparation time might be quite demanding for a newly minted Ph.D. While the financial concepts and quantitative methods presented in an entrepreneurial course are not advanced, such a course requires some experience or some substantial investigation of the application of these analytic tools in a high growth context. Most Ph.D courses are

focused on larger enterprises and research and not on start up to mezzanine financings. Second, students that take entrepreneurial finance may not necessarily be finance majors and therefore may not possess the prerequisite knowledge possessed by finance majors. Nor will they necessarily appreciate the rigor demanded by advanced finance courses. Third, Richard's department chair should consider spending some time in mentoring new Ph.Ds in what they may face in teaching. An investment in time and effort to help inexperienced faculty understand the challenges of teaching undergraduates can mitigate the time and frustration that many researchers feel when plunged into a classroom. Another benefit to mentoring at an early stage is avoiding the administrative headache of dealing with scores of students who feel disenfranchised from a professor. Had Richard not confronted student frustration after the first examination, his chair would have probably have had to deal with the crisis at the end of the course with a large percentage of the class earning a failing grade. With enough student dissatisfaction, enrollments in that particular professor's classes would drop and even with sound research performance, a chair might be faced with having to discharge a good researcher whose classes will not fill.

8. What implications does this case have in teaching other subjects?

Richard's dilemma is not unique to his particular subject matter or course. As his brief conversation with an accounting professor revealed, the large percentage of students who are working almost full time while taking a full load of courses leaves them making "rational" decisions concerning the extent of time they will devote to the subject matter. The large percentage of first generation college students may account for the student attitude that they are in college for a degree and not for an education. Dr. Hernandez learned that her students were deciding not to do certain homework because they viewed it as "busy work" and could sacrifice 20% of their course grade and still have the potential to pass the course. The challenge for professors is to give students a different perspective or rationale in making decisions about course loads and time commitments for homework. For administrators, there is a need to reconcile the messaging of: (1) we are here to support you, (2) oh, you better help us retain students, (3) we need more students to justify your salaries, (4) raise the bar, and (5) outcome assessment is coming so you better get YOUR act together! Administrators are faced with conflicting demands for excellence and retention. They are faced with conflicting demands for teaching substance and skills that create outcomes that can be measured in the workplace while retaining all students and managing faculty expectations for students that are working to pay for their education. Faculty orientation sessions need to address these conflicting realities. Such orientation sessions should better prepare faculty for reconciling competing goals and objectives. Richard and Nancy's discovery of students' pragmatic attitude toward the use of their time for homework versus other demands may

suggest that faculty should make a better argument to their students as to how homework and other assignments such as reading relate to their objective of completing a course. Selling students on the concept that the diploma is only a "receipt" for what should be a bag of intellectual "tools" and that learning skills and knowledge are what actually give a degree its value and not the diploma itself. Faculty should discuss the need to explain why certain homework assignments are given and how students should balance coursework with other commitments. The case suggests that pressures on administrators to produce new student assessments tools outside of student grades will add to conflict between students seeking degrees versus education and the pressure on faculty to "raise the bar."

9. What implication does the case have for a dean in dealing with faculty over student complaints?

The dean may have thought that a casual remark about student complaints would be more supportive of Richard than formally calling him in to talk about student complaints. However, it is more likely that his casual remark may have only served to create a rift between the dean and the professor. The dean's casual remark may have left Richard is more uncertain as to where he stands with the dean.

As an alternative, the dean could have asked Richard to come see him. The dean could then offer Richard some constructive suggestions. By diplomatically asking Richard if he has had some issues with his students and by offering some suggestions, the dean positions himself as a mentor in support of Richard. Such as strategy is an example of "servant" leadership. Richard would be learn that some students have gone to the Dean, but that the Dean is on his side in terms of helping him with the controversy. This strategy places the dean as mentor. Some deans will not be comfortable in that role. An alternative would be for the dean to arrange for a more senior faculty member to join the conversation. By commiserating over student performance and the difficulties of balancing student retention and maintaining academic discipline with Richard, the dean and a senior faculty member could share ideas on how to constructively deal with the problem.

Deans have to deal with a variety of constituents and stakeholders but sending out mixed messages will not please any of them. A better strategy for administration is to be honest about these conflicting demands and seek faculty involvement and input into reconciling competing pressures. Clearly, Richard did not have an accurate understanding of the types of students, their competence level or their motivations when he prepared his teaching strategy. Richard now needs advice on how to "restructure" his course without abandoning academic rigor and without flunking all his students.

On a broader scale, the issues of student recruiting, retention and outcomes assessment must all be reconciled. A discussion of the content of faculty orientations might

produce suggestions on improving the content to include information on student expectations, competence and performance. A discussion of student orientation programs might result in observations that students should be made aware of the pressures facing institutions from stakeholders. Some students have the impression that they are the "customer" and the faculty are the "waiters." These students need to be informed that alumni, donors and future corporate employers have an interest in making sure that students make the effort necessary to achieve some degree of competency. A discussion of the role of faculty in motivating students and helping them see the connection between their current reality and course material may be helpful in creating a list of strategies that can be used by faculty to reconcile competing demands on their institutions.

For future courses:

1. What steps can he take to improve his understanding of his student's motivations and knowledge of accounting and finance?

Richard might want to consider the following:

a. To deal with students who feel that they know more than they do and to get a better understanding of his current class, Richard should consider developing a self-assessment instrument and an objective assessment non-graded test. In fact, this case, taken from actual experience resulted in the professor developing both a self-assessment instrument and an objective examination of basic accounting and finance concepts. The self-assessment was passed out during the first class and the objective examination was given during the second class. Students were informed that the purpose of the two instruments was twofold: to give students an understanding of how accounting and corporate finance are integrated and part of the entrepreneurial course, and to provide students with the opportunity to evaluate their own understanding of finance and then be confronted with the results of a 'review' exam. Students were invited to bring accounting and finance textbooks (which they did not own) and any notes from their previous classes (which they did not have). The objective exam consisted of questions contributed by the faculty who normally teach finance. To insure that the questions reflected what was taught, finance faculty who normally teach the corporate finance course graciously wrote questions that designed to indicate whether a student understood basic financial concepts. The students were provided both scores during the third class along with a syllabus that was "tailored to reflect learning realities." The results were bi-furcated. The finance majors tended to have better skills with an

average on the objective test of 60%, non-majors tested miserably with the average on the objective test scoring below 30%. Richard decided to create teams lead by the finance majors who were responsible to see that each of their team members understood how to work problems during in-class workshops. Students were told to bring their texts to every class because all class work was graded. These in class workshops and homework resulted in grades that counted 20% of the course grade. To save on prep time, all homework was exchanged and graded in class. Students exchanged papers for grading purposes. The rules for homework permitted students to consult with each other. Richard figured that sometimes students can communicate better among themselves and would be more willing to seek help privately.

The subjective self-assessment survey confirmed that most of the students were taking the course as an elective and due to the convenient time than for the content. Knowing this, Richard used every lecture to remind students how helpful the particular topic is even for those not intending to start their own business. He realized that he had to sell the value of the course in order to entice students to develop a genuine interest in it.

2. What policies should Richard consider to better engage students in the material?

As previously discussed, Richard might want to conduct in-class workshops, conduct surveys, and to ask students about their experiences in industries illustrated by the text. He also bought a jar of wrapped candy and offered a candy to anyone who would ask a question about material in the text. By requiring that students bring their text to the class, Richard would ask students to read very short portions of it related to his lecture. And, when he passed out workshop cases for students to solve, he referred them to specific pages. Richard observed that by showing how the text could be used to solve problems, he noticed that students would mark their texts.

3. What strategies should Richard follow to enhance student participation in class?

Thanks to Richard's self-assessment survey, he knew which students were working part time. This allowed him to draw those students into conversation when he used the text's examples of issues facing small business. Helping students draw a line between what they are learning and applying them to their daily routine may be a sound strategy for enhancing participation in class. Richard also decided to inspect student notes three weeks into the semester but before the first exam. That strategy helped students recognize that merely copying what is on the white board is not enough. Richard developed a cover sheet so that

instead of writing individual comments on the notes, he could check a box such as "____ You do not cite the examples I gave in class which may make it difficult for you to apply the concepts to solving problems on future exams." or "____ Your notes are not dated so it is impossible for you to tell which days may be missing." This feedback alerted students that notes should not be confined to recording those concepts they don't understand, but to making a thorough track of what was presented so that theoretically the student could deliver a similar lecture. The review of notes was announced early in the course and Richard continued to warn students weekly that the note review was due on the third week of school. The results were most gratifying. Students were encouraged to share notes with each other. To facilitate student interaction, Richard asked students if they wanted to be listed in a student directory which would be password protected and posted on Blackboard where only classmates could access the information.