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JoAnn C. Carland, Western Carolina University

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JOURNAL OF THE INTERNATIONAL ACADEMY FOR CASE STUDIES

SPECIAL INSTRUCTORS' EDITION

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LETTER FROM THE EDITOR

Welcome to the *Journal of the International Academy for Case Studies, Special Instructors' Edition.* The International Academy for Case Studies is an affiliate 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 IACS is to encourage the development and use of cases and the case method of teaching throughout higher education. The *JIACS* is a principal vehicle for achieving the objectives of both organizations. The editorial mission of this journal 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.

The Academy does not take copyrights on the cases and manuscripts it publishes. Accordingly, 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 must 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.

It is with deep regret that we announce the passing of Dr. Larry Watts, the former Editor of the *Journal of the International Academy for Case Studies* and a very dear friend. Larry passed away this past year and he has left us with a deep sadness for his loss but also with many wonderful memories. Larry was extremely valuable to the Allied Academies organization and will be difficult to replace in the organization and impossible to replace in our hearts.

JoAnn Carland
Western Carolina University

CASE NOTES

NEW EXECUTIVE COMPENSATION AT COOPER TIRE

Javad Kargar, North Carolina Central University
Kofi A. Amoateng, North Carolina Central University

CASE DESCRIPTION

The primary subject matter of this case concerns the controversy about a new compensation plan for executive officers at the Cooper Tire & Rubber Company. The case is intended for use in undergraduate and graduate courses in compensation administration, human resource management, organizational behavior, or strategic management. Specifically, the case could be used in any business courses that address issues of incentive compensation, compensation communication, and employee motivation. Depending on the interests of the instructor, student attention could be focused on the design and implementation of the compensation plan described in the case or on the behavioral problems arising from the use of incentive programs. The broad purpose of the case is to illustrate the difficulties and complexities in the design of incentive pay program. The primary objectives of the case are to illustrate the relationship between executive compensation practices and motivational theories, and to highlight the importance of effective communication in building support for a company's incentive pay plan. The case is designed to be taught in one class hour and is expected to require two hours of outside preparation by students.

CASE SYNOPSIS

The case centers around the board of directors of Cooper Tire & Rubber Company, who have revised and approved a new executive compensation plan. Cooper is a well-established company that produces replacement tire and automotive components. The company employed 400 executive officers at the corporate and business levels. In addition to enhancing the executive earning potential, the board thought the revised executive compensation plan would promote growth of the company business, offer savings by having better control over the flow of funds into purchasing new equipment, and increase stockholders return on investment. Two years after the new plan was adopted, some executives felt that the new system was unfair and unrealistic because they had to work hard to make no bonuses, and that their business units were making more money when they were making less. Mr. Dattilo, the CEO, was concerned that he would lose some executives who were disgruntled with their bonuses. At the end of the case, he was trying to develop a proposal for discussion at an upcoming meeting with the board of directors. He was not sure how the executive compensation problem should be fixed, but he knew something should be done soon.

INSTRUCTORS' NOTES

The case presents fundamental strategy implementation issues such as compensation and motivational theories. An instructor may divide his/her class into small groups, with each group made up of 2-4 students. These groups should study the case (individually or collectively by groups), discussing it collectively and answering each question jointly. The students should be encouraged to read the references and support their answers to the questions. A representative from each group should present his/her group's answers to the entire class. The teacher can then make his/her own observations citing his/her own benchmarks. Recommended structure is a seventy-five minute class.

The groups may also be required to write all their answers in a formal manner and given them to the instructor. In this case, the instructor should make sure to read all the papers and return them to the groups with his/her comments in a timely fashion.

DISCUSSION QUESTIONS AND SUGGESTED RESPONSES

1. How would you characterize the executive compensation plan used at Cooper prior to 2001? What changes were made to the executive compensation program in 2001?

The changes in the executive compensation were:

♦	Targeting the base pay element of the company's executive compensation program at median levels for comparable positions at U.S. industrial companies with a comparable level of revenues. For most executives of the company, the old plan had low salaries.
♦	Targeting annual and long-term incentive elements of the program at levels based on survey data for publicly held U.S. industrial companies or their component operations comparable in size to those managed by each executive officer. For most executives of the company, the old plan had high target annual incentive awards, and the performance targets were set at lower levels.
♦	Replacing return on equity with return on invested capital as the performance measure for corporate officers in the annual incentive plan.
♦	Replacing return on equity with operating cash flow as the performance measure in the long-term cash incentive plan for corporate officers.
♦ ♦	Replacing return on assets managed with operating cash flow as the performance measure in the long-term cash incentive plan for division officers.

2. What were the reasons that Cooper's Board of directors changed to the new executive compensation plan?

The new executive compensation plan was developed for several reasons. First, the Board of directors believed that these changes reflect the requirements of the new organization and would provide a competitive system. Second, the Board of directors wanted to address the problem of stockholder value. The performance targets under the annual and long-term incentive compensation programs were set at higher levels than in the years prior to 2001. The Board believed that the new plan would motivate and reward those managers to create superior shareholder value by better controlling in capital expenditure. It was reasoned that higher performance targets would have the effect of more closely tying aggregate executive compensation to the creation of shareholder value. Finally, the Board thought the changes in the plan would attract and retain superior management talent.

3. Do you think that the Cooper's new compensation plan for the key officials is being properly designed and implemented? Why or why not? What do you believe are the major advantages and disadvantages of the new executive compensation plan?

This question would help students connect incentive models to a practical situation, which has some challenging realities. The topic of executive compensation normally generates heated discussion. Stock options have become the fastest growing segment of executive pay. Current statistic indicate that stock options account for more than half of the CEO compensation and about 30% of senior operating managers' pay in the largest U.S. companies. This trend is relatively new. The takeover movement of the 1980s provided a powerful incentive for companies to introduce compensation schemes tied directly to stock prices. Before that, executive pay was largely a matter of salaries and of bonuses that were paid out only if financial targets were met. It was widely thought that a company' stock price correlated with its ability to meet certain financial goals. A number of studies, however, cast doubt on the supposed relationship between bonuses, financial targets, and stock prices. For example, Michael C. Jenson and Kevin J. Murphy's often cited HBR article "CEO Incentives-It's Not How Much You Pay, But How" (May-June 1990) showed that there was virtually no link between how much CEOs were paid and how well their companies performed for shareholders.

In the early 1990s, corporate boards began to highlight shareholder value. They became convinced that the surest way to align the interests of managers with those of shareholders was to make options a large component of executive compensation. By the mid-1990s, CEOs and other senior managers found themselves with significant stock and options holdings. As the stock market began its ascent, executive pay mounted. But the correlation between a CEO's pay and the stock market did not prove that a company was enjoying superior performance: when the market is rising, stock options reward both superior and subpar performance. That's because any increase in a company's share price constitutes "positive performance" with stock options. Any increase in share price will reward the holder of a stock option without distinguishing between good and bad performance. The almost 100% increase in major stock market indexes between 1995 and 1997 exposed this shortcoming.

The new compensation plan at Cooper can be compared to criteria for a well-designed executive compensation strategy, many of which are cited below:

a.	The compensation plan must support the mission and goals of the company.
b.	It must attract and retain the kind of talent that is willing to expend the effort and the energy necessary to lead the organization successfully.
c.	It must make it more difficult for employees to be attracted to recruiting offers from other organizations.
d.	The plan must recognize, stimulate, and reward superior performance.
e.	It must be cost affordable.
f.	It should link the interests of key officials with those of the shareholders.
g.	The performance measures should reflect the direct contributions of executives in activities that they control.
h.	The performance measures should include all the important activities of executives. Since executives tend to perform those behaviors that are measured, the criteria used should be inclusive of the important job behaviors.
i.	Criteria for incentives must be measurable and verifiable.
j.	Standards for high performance should be challenging, well identified and specifically described.
k.	The magnitude of pay differentials for performance differences should be significant enough to affect officer behavior.
l.	The plan should be clear and simple enough to be readily understood by employees since their satisfaction with incentive plans is positively related to their understanding of it.
m.	Rewarding superior performance at the executive level requires payments of significant size today and guaranteed future payments predicted on the achievement of results.
n.	To lure and retain competent leader, a compensation plan should include base pay, short-term incentives, and long-term incentives.
o.	Performance packages must be the dominant part of the compensation mix at the operating level.
p.	For incentive compensation to work, corporate boards must choose both the right measures and the right levels of performance.
q.	Some qualitative measure such as leadership, strategy, and communication skills should also be considered as part of the performance assessment process.

The new plan meets some of the criteria above, but certainly not all of them. On the positive side, this plan could help the company grow its revenues, could improve stockholders value, is tied to individual manager performance, offers opportunities for increased pay, provides for sizable pay differences in relation to productivity, and has clear performance measures. The top leaders are being rewarded for both short-term results and long-term growth of the organization. The plan will improve short-term results, because officials will try to reduce the flow of funds into purchasing new equipment and building new facilities. At the same time, it does not prevent them from improving long-term results. It does not stop them from spending in such areas as maintaining current plant and facilities, providing adequate training, and implementing proper programs.

However, the plan has some deficiencies in that it is not well understood by many executives, may not effectively measure executive officers' direct individual efforts, is related to some factors outside the officers' control, and may have performance standards that are unrealistic for some managers. Note that the case provided little information about the early effects of the pay plan on the company sales and costs, which were not available to the authors, thus these criteria are not addressed above. Some students may argue that the corporate objectives should be related to some results achieved with those of other organizations in a similar competitive environment. In addition, external factors could also play major roles in the performance of a business. Finally, it takes several years for a company to right itself. The performance of Cooper's top executive team may show little progress on the quantitative side but very positive strategic movement on the qualitative end.

4. Does the company's stock options set the right measure of executive performance at the corporate level? Does the company's stock options set the right level of performance at the corporate level?

The answer for the first part of the question is yes. In principle, stock options employ the right measure of performance for corporate executives who are responsible for the company as a whole. After all, the value of a stock option is driven by the share price, which is the largest component of shareholders' total return.

But, the answer to the second part of the question is no. Shareholders expect boards to reward management for achieving superior returns - that is, for returns equal to or better than those earned by the company's peer group or by broader market indexes. That is how institutional investors distinguish performing from underperforming companies. To help investors monitor executives pay, the Securities and Exchange Commission (SEC) even requires companies in their annual executive compensation disclosure to report the total return to shareholders relative to their peers or to the market as a whole. But although the boards of Cooper publicly acknowledge the paramount importance of delivering superior returns to shareholders, it is not setting the right level of performance.

The problem lies in the way stock options are structured. The exercise price is established at the market price on the day the options are granted and stays fixed over the entire option period. If the share price rises above the exercise price, the option holder can cash in on the gains. Therefore, fixed-price options reward executives for any increase in share price - even if the increase is well below that realized by competitors or by the market as a whole. For example, assume that the CEO is granted options exercisable over the next ten years on one million shares at the current share price of $100. If the share price rises by

5% a year to $163 at the end of the period, the CEO will take home a gain of $63 million. But if the share prices of competitors grow at 12% a year during the same period, an argument can be made the CEO does not deserve to cash in the options. This is like offering high reward for such poor long-term performance.

Again, achieving superior returns is the ultimate goal for shareholders. It is, therefore, the only appropriate target for the CEO, the board, and corporate-level executives. Superior managers will usually do better with indexed option packages than with conventional packages. And the better a company does relative to the index, the higher the gains.

5. Are the performance schemes at the business unit level based on the right measure and right level of performance?

The primary source of a company's value lies in its operating units. The way the operating unit executives are evaluated and paid affects their behavior and the business's results. In order to close the gaps between pay and performance at the operating unit level, performance targets and incentive pay must be aligned with the interests of shareholders.

Most of the boards have generally believed that granting stock options would successfully align the interests of operating unit managers and shareholders. But granting options to such managers does not guarantee their performance. That's because a company's stock price is not an appropriate measure of the performance of an individual business unit. The managers of operating units usually have a limited impact on the company's overall success or on its stock price. Incentives based on the share price will not give them the rewards they deserve. A stock price that declines because of disappointing performance in other parts of the company may unfairly penalize the executives of a superior-performing operating unit. On the other hand, if an operating unit performs poorly but the company's share prices rise because of superior performance by other units, the executives of that unit will enjoy an unearned windfall.

6. What measures then will focus better on operating unit performance?

The financial measure used in Cooper is return on invested capital (ROIC). Several studies show that earnings measures are not reliably linked to shareholder value because they do not incorporate the cost of capital and may be calculated using different accounting methods that can produce different numbers. ROIC and ROE have similar accounting shortcomings. The best way is by valuing a unit as if it were a stand-alone business. The parent's share price, after all, largely reflects the aggregate expectations of its operating units.

One way to evaluate business units is by considering "Shareholder Value Added approach." SVA has one clear advantage over residual income measures: it is based entirely on cash flows and does not introduce accounting distortions. It can therefore serve as a sound basis for an incentive pay plan. SVA puts a value on changes in the future cash flows of a company or business unit. If a company is to deliver superior returns to its shareholders, its units must create superior SVA. Value creation prospects can vary greatly from one business unit to another. Managers who perform extraordinarily well in low-return businesses will be rewarded, while those who do poorly in high-return businesses will be penalized. The first step in finding leading indicators is to see which of the standard cash-flow drivers of value - sales growth, profit margins, and investments - are the critical drivers. Then a sensitivity analysis can be used to identify leading indicators of value associated with each cash flow drivers of value. This approach will reveal how significantly they are correlated with each business unit's value. Understanding the relationship between leading indicators is essential for identifying value-creation strategies.

You may ask, at what level of performance do you start rewarding business unit managers with pay for performance? The right answer would seem to be, "When they create superior SVA in their units." When the difference between actual and expected SVA is positive, you have superior SVA. But value creation is a long-term phenomenon. Looking at a single year reveals little about the long-term ability of a business to generate cash. To motivate managers to focus on opportunities to create superior SVA beyond the current period, the performance evaluation period should be extended to a rolling three-year cycle. The company can then retain a portion of incentive payouts to cover against future underperformance.

7. What motivational theories are related to the new executive compensation plan at Cooper Tire & Rubber Company? Explain your answer.

The motivational theories that are related to the case, include: goal-setting theory, equity theory, expectancy theory, reinforcement theory, Herzberg's motivator-hygiene theory, and Maslow's needs hierarchy theory.

Goal-setting theory

Goal-setting theory states that individuals make calculated decisions about their desired goals. Once individuals determine the goals they intend to achieve, these goals direct and motivate efforts to attain them. Principles of goal-setting theory can be explored in terms of the effectiveness of goal setting, which are relevant, specific, measurable, verifiable, realistic, challenging but attainable, employee involvement in the goal setting, and feedback. Although the performance measures in the case are relevant, specific, measurable, and verifiable, executives were not involved in the goal setting, and to some executives they are perceived to be unrealistic, thus reducing the motivational potential of the goals. More feedback would increase the effectiveness of the compensation plan.

Equity theory

Equity theory is associated with justice and fairness. The individual must fundamentally believe that he/she is being treated fairly in comparison to what he/she sees others receiving. If the employee perceives inequity, she/he will act to correct the inequity by lowering productivity, reducing quality of output or increased absenteeism. Equity theory can be applied to the facts in the case through exploration of some executives' perceptions of the inequity between their inputs and outcomes in a poorly equipped facilities compared to the inputs and outcomes of other executives who have better equipped facilities. Executives with poor facilities may perceive that they work harder (greater inputs), but realize lower performance and earnings (lower outcomes) than executives with better facilities. That generates feelings of being unfairly treated, leading to job dissatisfaction, poor attitudes toward the company, and possible turnover.

Expectancy theory

The case provides a good illustration of expectancy theory in the connections between effort and performance, and performance and outcomes. For the new bonus plan to effectively motivate the executives, they must perceive that their efforts on the job will lead to desired performance and that the desired performance will lead to attractive rewards. For some of the business unit executives, the perceived relationship between effort and performance might be weak since they don't believe that their efforts will result in high performance, which limits the motivational effort of the new compensation plan for them.

Herzberg's motivator-hygiene theory

There is also an element of Herzberg's motivator-hygiene theory that is relevant to the case. It appears that the focus of the Board's attention in the executive compensation area is on direct payments to the executives. Executives already have the employee benefit package as indirect payments, and it seems acting as hygiene factor since it is not "in play" in the compensation program. Motivational factors are benefits that tend to increase employee satisfaction because they like to feel that they are getting something beyond a paycheck for their effort at work. One may argue that the cash bonus, and stock options are motivational factors. But, the case suggests in support of Herzberg's theory, that the motivational impact of employee compensation programs may be limited.

Reinforcement theory

The reinforcement theory ignores the inner state of an individual and concentrates solely on what happens to a person when he/she takes some action. The theory states that behavior is a function of its consequences. The utilization of a cash bonus system in the case builds on the premises of reinforcement theory. The business unit executive officer may receive favorable outcome in the form of cash bonus to the extent that he/she exhibits the desired behavior of controlling level of capital expenditure. The better the executive exhibits the desired behavior, the greater the magnitude of the reward.

Maslow's needs hierarchy theory

One can also relate Maslow's needs hierarchy theory to the case. In addition to the proposition that individuals tend to pursue needs in a hierarchical manner, Maslow's theory also maintains that one is motivated by what he/she is seeking, not by what he/she already has. In the case, executives are focused on how their earnings potential would be affected by the new compensation plan. Executive officers already have the employee benefit package, and it seems to have little or no salience as a motivational factor since it is not included in the compensation program. The bonus payment might satisfy an executive's esteem needs. Esteem needs includes pay (as a symbol of status) and recognition of work well done. Although some may argue that the compensation plan fails to address the esteem needs of executives, and conclude that based on the theory, the compensation plan is not an effective motivator.

8. How effective was cooper's top management in communicating its compensation program to executives at both corporate and business levels? Why?

Cooper's top management might have done a good job of communicating the mechanics of the new compensation plan by holding meetings with the executives, explaining the reasons for the changes, and illustrating the manner by which bonus would be calculated. However, top management appeared to miss the opportunity to persuasively communicate the value of its new bonus system.

9. What do you think Mr. Dattilo and Board of directors should do at the end of the case? What options do they have? Explain your answer.

The new compensation plan is only two years old, the results are preliminary, some executives might not be happy with it, and Mr. Dattilo is trying to do something about it. Some actions that could be considered are:

a. Since the new compensation program is highly sensitive to capital expenditure more than the old program, he should arrange different meetings to make the executives understand it and have more control over their capital expenditures.
b. Conduct periodic formal reviews of the compensation plan. The entire program has not yet been fully implemented.
c. He might consider some qualitative measure such as leadership, strategy, and communication skills as part of the performance assessment process.

d. Determine the real contribution of each business unit to the company's overall share price.

e. Reward operating unit managers only when they outperform the competition. They can do that by tying the plan's exercise price to a selected index. The board can increase the pay of superior performers while appropriately penalizing poor ones. Indexed options have clearly advantages over fixed-price options. Indexed options do not reward underperforming executives simply because the market is rising. Nor do they penalize superior performers because the market is declining. They can keep executives motivated not only in the bull markets everyone has grown accustomed to but also in sustained bear markets. They link pay to superior performance in all markets. The problem is the underperforming executives are likely to balk at the more exacting performance standards of indexed options. Also, the company should carefully consider how switching to indexed options will affect the motivation of their executives. In addition, board members must be persuaded to agree to the same standards for themselves if they ask management to accept indexed options. To persuade executives to accept indexed option packages, it should be structured so that exceptional performers can earn greater returns than they could with conventional options. The board needs to take some actions to make it work. First, the company should increase the number of options they grant to executives. Second, the board should lower the exercise price.

It should be acknowledged that there is no perfect incentive pay plan, or will there likely ever be one.

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ST. LOUIS CHEMICAL: THE CASH DILEMMA

David A. Kunz, Southeast Missouri State University

CASE DESCRIPTION

The primary subject matter of this case concerns the difference between cash and accounting profits and the problems a company can encounter if profits and cash are assumed to be the same. Secondary issues examined include the preparation and interpretation of the Statement of Cash Flows, fundamentals of working capital management, and financial statement analysis. The case requires students to have an introductory knowledge of accounting, finance and general business issues thus the case has a difficulty level of three (junior level) or higher. The case is designed to be taught in one class session of approximately 1.25 hours and is expected to require 3-4 hours of preparation time from the students.

The case can be used independently or as follow-up to St. Louis Chemical: The Beginning and St. Louis Chemical: The Start Up

CASE SYNOPSIS

The case tells the story of Don Williams, President and primary owner of St. Louis Chemical, and his current dilemma. By almost all measures the performance of St. Louis Chemical has been outstanding over the last three years. Double-digit sales growth has been achieved, new product lines have been added and profits have more than tripled. But despite this apparent success, cash flow has been a problem. It has been a struggle for Williams to maintain sufficient cash to pay obligations in a timely manner. The company reached its bank-borrowing limit at the end of last year but Williams successfully negotiated an additional $3,000,000 in borrowings using fixed assets as security. The additional capacity was used during the year just ended as well as an extra $2,000,000 working capital loan extended by the bank. The bank has refused to grant additional loans until the debt ratio can be lowered to below 50% and the Times Interest Earned Ratio increased to above four.

INSTRUCTORS' NOTE

Case Overview

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DISCUSSION QUESTIONS

Ron Burk, a financial advisor, has been hired by the firm's CEO, Don Williams, to provide assistance developing financing options, and in solving the firm's cash problems. Students are asked to assume the role as an assistant to Burk and answer the following questions.

1. **Prepare a Cash Flow Statement for 2000 and 2001. Interpret the information provided by the cash flow statements. How has St. Louis Chemical been using its cash and why is additional cash needed?**

(See completed schedule three) A cash flow statement provides information regarding the amount and sources of cash coming into a firm for the period and how the cash was used. Inflows and outflows are divided into three categories, cash flow from operations, cash flow from investing activities and cash flow from financing activities. As its name indicates the focus is on cash not accounting profits.

St. Louis Chemical's cash has been used to primarily finance increases in accounts receivables, inventory and additional fixed assets.

Cash used to finance (000's)/$	2000	2001
Accounts receivable increase	2,940	4,137
Inventory Increase	2,666	3,006
Increase other current assets	5	44
Increase in land		1,100
Increase in fixed assets	500	2,600
Decrease in accrued liabilities	114	0
Total cash used	6,225	10,887

Cash has been generated primarily from income, deprecation expense, increasing in accounts payable and increasing on short-term and long-term borrowings.

Cash sources (000's)/$	2000	2001
Net income	773	869
Depreciation expense	460	500
Increase in accounts payable	2,206	4,351
Increase in short-term borrowings	1,100	2,000
Increase in long-term borrowings	1,700	3,000
Increase in accrued liabilities		142
Total cash generated and borrowed	6,239	10,862

Analysis of the cash flow statements reveals that while the company generated $1,233,000 and $1,396,000 in cash from income and depreciation expense during 2000 and 2001 respectively. The company used all that cash plus substantially more to finance the company's asset growth. The policy of "next day delivery" service, instituted by Williams requires the company to carry large amounts of inventory and the relaxed accounts receivables collection policy results in large receivable balances. To efficiently handle the larger sales volume the firm needed to purchase additional land and fixed assets. To finance the asset growth the company borrowed $2,800,000 in 2000 ($1,100,000 short-term and $1,700,000 long-term) and another $5,000,000 in 2001 ($2,000,000 short-term and $3,000,000 long-term) from its bank. The company's vendors have also contributed financing as accounts payable increased by $2,206,000 in 2000 and another $4,351,000 in 2002. The bank has indicated no additional funds will be made available until the debt ratio is lowered to 50% and the Times Interest Earned ratio is increased to at least 4.0. Although the case does not discuss the response of the company's vendors to the aging of accounts payables, it is likely the company has experienced an increase in collection calls from its suppliers and perhaps threats of eliminating the firm's credit.

Examing the cash flow statement clearly indicates why despite increasing profitability the company continues to experience cash flow problems and has had to borrow to the limit. Students should see the benefits of the cash flow statements, and one of their recommendations should be to require the inclusion of the cash flow statement as part of the company's regular financial statement package.

What Williams has overlooked or doesn't understand is that assets are required to generate sales and assets require financing. St. Louis Chemical's rapid sales growth has required a large increase in assets and additional financing. Most business startups have limited capital thus if sales grow faster than expected a capital shortage may occur. If capital is limited, a new firm needs to control sales growth to avoid a cash or capital crunch.

2. Calculate the return on equity for the last three years using the extended DuPont equation. Interpret the results. What does the equation reveal regarding the company's profitability, use of assets and sources of financing?

The extended DuPont equation is a method of calculating a firm's return on equity (ROE) by utilizing the profit margin (PM), total asset turnover (TATO) and equity multiplier (EM). The extended DuPont equation is: ROE = PM x TATO x EM. Profit margin is calculated by dividing net income (NI) by sales revenue and is a measure of how much of each sales dollar flows to the "bottom line" as profit. Both components are found on the income statement. A firm's profit margin is an indicator of how well operating costs are controlled. The TATO is a measure of how well a firm's management has used the firm's assets to generate sales and is calculated by dividing sales revenue by total assets. The TATO relates an income statement number, sales revenue, with a balance sheet number, total assets. A company that is operating with a high the TATO generates greater sales per dollar than a firm with a lower TATO. Higher is better. A firm's equity multiplier is calculated by dividing total assets by total common equity and is a measure of a firm's financial leverage. The more debt used in a firm's capital structure the greater the equity multiplier. The DuPont equation illustrates that a firm's ROE can be improved by increasing any one of the equation's three components.

ROEs calculated with the DuPont equation for St. Louis Chemicals for the three year period 1999-2201 are as followed:

Year	ROE	=	PM	x	TATO	x	EM
1999	.0351 or 3.51%	=	.0059	x	3.61	x	1.66
2000	.0957 or 9.57%	=	.0129	x	3.37	x	2.20
2001	.0972 or 9.72%	=	.0110	x	2.81	x	3.15

The firm's ROE has steadily increased from 3.15% in 1999 to 9.72% in 2001. The firm's profit margin is relatively low although it has improved since 1999, total asset turnover continues to decline and the equity multiplier continues to increase. The company can improve its ROE by better controlling of operating costs and better utilization of its assets. The firm's debt level is probably too high.

3. Evaluate the company's performance for the last three years using ratio analysis. Calculate the following ratios and evaluate performance.

a) Current ratio
b) Accounts receivable turnover

c) Days sales outstanding (DSO)
d) Inventory turnover - using cost of goods sold in the numerator
e) Days invested in inventory - using cost of goods sold
f) Fixed asset turnover
g) Total asset turnover
h) Times interest earned ratio (TIE)
i) Debt ratio
j) Basic earning power
k) Profit margin
l) Return on assets
m) Return on equity
(See complete schedule four)

Ratios for a single year can provide insight into a company's performance but to increase the information content of ratio analysis, ratios need to be calculated for a number of years (trend analysis). In general, analysis of St. Louis Chemical ratios indicates declining financial performance in almost all areas except profitability. Liquidity has declined, asset utilization is poor and getting worse, and the debt ratio has increased.

The firm needs to review its policy of using a "relaxed" collection effort to attract additional sales and policy of carrying sufficient inventory to avoid "stock outs". A balance needs to be achieved between carrying costs and lost sales due to "stock outs". The current policy of paying its vendors late will most likely adversely affect the firm's ability to obtain credit in the future.

Comparing St. Louis Chemicals ratios with industry averages provided by RMA would also provide additional insight regarding performance.

4. Calculate the firm's Cash Conversion Cycle for the last three years. Interpret the results. How can the Cash Conversion Cycle be used to evaluate a firm's working capital policy? Evaluate the firm's working capital management.

The cash conversion cycle is a tool used to measure a firm's use of its working capital. It is the length of time between when cash leaves the company (to pay for material, services and labor) to when cash returns to the company (usually collection of receivables). The cash conversion cycle is equal to the inventory conversion period (days of inventory) plus the receivables collection period (DSO) less payables deferral period. The payables deferral period is the average length of time between the purchase of materials and services and the payment of cash for them. To effectively manage working capital a firm will attempt to balance the cost of carrying inventory and financing receivables with the impact on sales of lower inventories and tighter credit. It must also consider the impact on its credit worthiness of paying its accounts payables late.

The cash conversion cycle for St. Louis Chemical increased from 48 days in 1999 to 56 days in 2000 as the firm's inventory conversion period and DSO increased. The cash conversion cycle would be even greater if the firm had not delayed its payments to it vendors and service providers. The cash conversion cycle decreased slightly to 54 days in 2001 as the increase in the payables deferral period more than offset the increases in the inventory conversion and receivables collection periods.

Year	Cash Conversion Cycle						
	=	Inventory Conversion Period					
	+	Receivables Collection Period					
	-	Payables Deferral Period					
1999	48 Days	=	38 Days	+	32 Days	-	22 Days
2000	56 Days	=	47 Days	+	41Days	-	32 Days
2001	54 Days	=	52 Days	+	50 Days	-	48 Days

As stated as part of the answer to question 3, the firm needs to review its policy of using a "relaxed" collection effort to attract additional sales and policy of carrying sufficient inventory to avoid "stock outs". A balance needs to be achieved between carrying costs and lost sales due to "stock outs". Payment of vendor invoices also need to be reviewed to avoid future credit problems.

5. Based on answers to questions 1-4, summarize why the firm is experiencing cash problems? Provide your recommendations to improve the cash situation.

The firm's cash problems are the result of:
a) Rapid sales growth
b) A relaxed credit policy
c) An inventory policy based on never missing a sale

Student recommendations to improve performance should include:
a) A detailed review of operating costs in an effort to increase the firm's profit margin.
b) A review of the firm's credit policy and in particular the "relaxed" collection effort that has allowed accounts receivables to steadily increase.
c) A review of the firm's inventory policy.
d) It may be necessary to limit sales growth until the firm can achieve a stronger cash position.

6. What alternatives are available to the firm to acquire the new water treatment product line and finance the required sales growth for 2002?

The case doesn't allow many options. Additional equity is not possible because of Williams' desire not to reduce his ownership percentage. It may be possible to find another bank to replace the current lender. Finding a replacement bank will require time and is probably unlikely given the company's relatively high debt ratio and TIE ratio. A more reasonable alternative would be to take a more aggressive approach to the management of its current assets. Reducing the inventory conversion period from 52 days to 40 days and the DSO from 50 days to 40 days will "free up" enough additional financing to more than meet the $4,500,000 needed to acquire the water treatment product line and projected sales growth for 2002. It would also allow the payable deferral period to be reduced from 48 days to 40 days.

Improving working capital management will increase the firm's ROE, reduce its cash conversion cycle as well as provide the necessary financing.

Schedule One
St. Louis Chemical
Income Statements (000's/$)

	1999		2000		2001	
	$	%	$	%	$	%
Revenue	43,755	100.00	59,962	100.00	78,953	100.00
Cost of Goods Sold	36,369	83.12	49,828	83.10	65,847	83.40
Gross Profit	7,386	16.88	10,134	16.90	13,106	16.60
Operating Expenses Selling	3,894	8.90	4,725	7.88	6,237	7.90
General & Admin.	2,949	6.74	3,958	6.60	4,990	6.32
Total	6,843	15.64	8,683	14.48	11,227	14.22
Operating Profit	543	1.24	1,451	2.42	1,879	2.38
Interest Expense	160	0.37	298	0.50	582	0.74
Earnings Before Taxes	383	0.87	1,153	1.92	1,297	1.64
Income Tax Expense	127	0.28	380	0.63	428	0.54
Earnings After Taxes	256	0.59	773	1.29	869	1.10

Schedule Two
St. Louis Chemical
Balance Sheets (000's/$)

	1999		2000		2001	
	$	%	$	%	$	%
Current Assets						
Cash	25	0.21	39	0.23	14	0.05
Receivables	3,889	32.10	6,829	38.40	10,966	38.96
Inventory	3,839	31.68	6,505	36.58	9,511	33.79
Other current assets	27	0.22	32	0.18	76	0.27
Total current assets	7,780	64.21	13,405	75.39	20,567	73.07
Fixed Assets						
Land	610	5.03	610	3.43	1,710	6.08
Gross fixed assets	4,996	41.23	5,496	30.91	8,096	28.77
(less accum. depreciation)	(1,269)	(10.47)	(1,729)	(9.73)	(2,229)	(7.92)
Net fixed assets	3,727	30.76	3,767	21.18	5,867	20.85
Total fixed assets	4,337	35.79	4,377	24.61	7,577	26.93
Total Assets	12,117	100.00	17,782	100.00	28,144	100.00
Current liabilities						
Account payables	2,223	18.34	4,429	24.90	8,780	31.19
Short-term notes payables	1,300	10.73	2,400	13.50	4,400	15.64
Accrued liabilities	292	2.42	178	1.01	320	1.14
Total current liabilities	3,815	31.49	7,007	39.41	13,500	47.97
Long-term Total liabilities	4,815	39.74	9,707	54.59	19,200	68.22
Shareholders' equity						
Common stock	2,000	16.50	2,000	11.25	2,000	7.11
Paid in capital	1,500	12.38	1,500	8.44	1,500	.33
Retained earnings	3,802	31.38	4,575	25.72	5,444	19.34
Total equity	7,302	60.26	8,075	45.41	8,944	31.78
Total liabilities & equity	12,117	100.00	17,782	100.00	28,144	100.00

Schedule Three
St. Louis Chemical
Statements of Cash Flow (000's/$)

	2000	2001
Cash flow from operations		
Net Income	773	869
Plus depreciation expense	460	500
Change in receivables	(2,940)	(4,137)
Change in inventory	(2,666)	(3,006)
Change in other current assets	(5)	(44)
Change in account payables	2,206	4,351
Change in accrued liabilities	(114)	142
Total cash flow from operations	(2,286)	(1,325)
Cash flow from investing activities		
Change in land	0	(1,100)
Change in fixed assets	(500)	(2,600)
Total cash flow from investing activities	(500)	(3,700)
Cash flow from financing activities		
Change in short-term notes payables	1,100	2,000
Change in long-term liabilities	1,700	3,000
Change in common stock	0	0
Dividends paid	0	0
Total cash flow from financing activities	2,800	5,000
Net cash flow	14	(25)
Plus beginning cash	25	39
Ending cash	39	14

Schedule Four
St. Louis Chemical
Ratios

	1999	2000	2001
Current Ratio	2.04	1.91	1.52
Accounts receivable turnover	11.25	8.78	7.20
Days sales outstanding (DSO) or Receivables collection period (days)	32.00	41.00	50.00
Inventory turnover	9.47	7.66	6.92
Inventory conversion period (days)	38.00	47.00	52.00
Payables deferral period (days)	22.00	32.00	48.00
Cash conversion cycle (days)	48.00	56.00	54.00
Fixed asset turnover	10.09	13.70	10.42
Total asset turnover	3.61	3.37	2.81
Times interest earned (TIE)	3.39	4.87	3.23
Debt ratio	39.74%	54.45%	68.22%
Basic earning power	4.48%	8.16%	6.68%
Profit margin	0.59%	1.29%	1.10%
Total asset turnover	3.61	3.37	2.81
Return on assets (ROA)	2.12%	4.34%	3.09%
Equity multiplier	1.66	2.20	3.15
Return on equity (ROE)	3.51%	9.57%	9.72%

NEW VISION: FUND-RAISING, TAX CREDITS AND MARKETING STRATEGY

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CASE DESCRIPTION

The primary subject matter of this case concerns marketing communications. Secondary issues examined include mental health care marketing, not-for-profit marketing, fund-raising, and professional selling. The case has a difficulty level of four, appropriate for senior level. The case is designed to be taught in one class hour and is expected to require three hours of outside preparation by students.

CASE SYNOPSIS

This case is a classic example of the need for an integrated marketing communications plan for a not-for-profit organization. Interestingly, the organization, a private counseling agency by the name of New Vision Youth & Family Services, Inc. was extremely successful in obtaining clients from referring entities (juvenile courts, schools, and state social service agencies). New Vision was so effective in obtaining clients from the referral market that they did not feel the pressure to develop a marketing communications campaign aimed to the primary market (community residents in need of counseling and potential donors). They did not even have an ad in the Yellow Pages. However, the need for public awareness became evident when they desired to expand and have a capital fund drive.

The capital fund drive was for the purpose of building an adjacent recreation and education center to their headquarters office. New Vision sought and obtained permission to issue tax credits offered by the state of Missouri under the Youth Opportunity Program to donors who qualified. The managing partners of New Vision felt these tax credits would serve as ideal incentives for donors to give money to New Vision's capital fund. The problem became evident when potential donors were approached and they had never heard of New Vision. Because there is a time limit on the offering of the tax credits, the case provides a sense of urgency to act before the tax credits run out.

INSTRUCTORS' NOTES

RECOMMENDATIONS FOR TEACHING APPROACHES

It is recommended that students be provided the following discussion questions to answer following their reading of the case. Class discussion should be guided by these questions. The instructor could relate the company, New Vision, to that of a similar counseling agency in the local community to help students make the connection to this type of business.

DISCUSSION QUESTIONS AND SUGGESTED RESPONSES

1. **Provide a SWOT analysis of New Vision.**

Strengths:

- ♦ New Vision has a stable clientele referred by state government agencies, juvenile court systems, and school systems.
- ♦ New Vision has high quality employees and independent contractors that share in the company's philosophy and dedication to working with youth, families and other professionals.
- ♦ New Vision evidently has a strong reputation for providing quality counseling services as demonstrated by the repeat business offered by the referring agencies and by the YOP tax credits received by the state government.
- ♦ Revenues for New Vision are not based on state government funding.

Weaknesses:

- ♦ New Vision is not well known by community residents and most potential donors.
- ♦ Why would someone want to donate to an unknown entitiy?
- ♦ Marketing expertise is low at New Vision.
- ♦ The period available to award state tax credits was only two years.
- ♦ Most donors may not need state tax credits from New Vision. A company or individual would have to owe a large sum in state taxes to benefit from the credits. Tax credits are available in discounted forms from other entities.
- ♦ Message strategy for marketing communications makes it difficult to incorporate testimonials due to privacy issues.

Opportunities:

- ♦ There is no other mental health agency in the area that provides the same range of services as New Vision does.
- ♦ The state and national environment favors the advancement of counseling services, especially for youth.
- ♦ Partnerships could be forged between corporations and civic organizations (constituencies) and New Vision.

Threats:

- ♦ Competition for donations comes from multitudes of sources: Community Counseling Center; specialized counseling services (domestic violence safehouses); churches; civic clubs; etc.
- ♦ Clients who rely on health insurance benefits or state benefits to cover mental health counseling may find these carriers will not extend coverage as anticipated.

2. **Is the major issue of this case a fund-raising problem or marketing strategy problem?**

It would be too narrow to classify New Vision's problems as a fund-raising problem. It would be a mistake to seek donations without proper marketing planning. Strategic marketing planning is needed to define target markets/audiences (clients and constituency support groups/donors) and to develop a marketing mix (product, price, promotion, distribution) appropriate for these audiences. For example, the concerns of the constituency support groups may involve a tax advantage, an interest in the social cause of providing mental health services, an interest in improving the quality of life for youth, an interest in helping families in need of counseling, or a combination of these concerns. An understanding of these concerns can lead New Vision to developing appropriate marketing strategies for the various support groups. Ferrell, Madden and Legg (1986) offered a strategic planning framework for funding of mental health. The first stage of their framework recommends the diagnosis of the present funding situation, understanding the factors affecting funding. Stage two suggests a prognosis for future funding with an understanding of the perceptions and involvement of funding-related publics. The next stage is that of formulating strategy which centers on targeting more stable and substantial donors and developing a communication strategy to accurately and positively depict the organization. Stage four involves a coordination of the message and media strategies. Stage five is the implementation stage, followed by the final stage of monitoring outcomes.

3. Are there any marketing communication models which could provide direction to New Vision in its efforts to secure donations from individuals or constituency support groups?

A. The Foote, Cone and Belding Advertising Agency (FCB) model can provide a structure for setting a marketing communication objective (Lavidge and Steiner 1961). The model below illustrates the 2 by 2 matrix connecting levels of involvement with with either a "thinking" or "feeling" approach. Thus the donor group/individual would need to be understood prior to selecting a communication strategy approach. Typically making sizeable donations ($100 or more) would place the group/individual in the high involvement category. Agencies such as the United Way would be in the high involvement-thinking category since they have a review board which evaluates potential not-for-profit organizations to donate funds to. Thus, the creative approach or message strategy would need to focus on New Vision's performance outcomes, including statistics on youth served, families served, number of youth continuing their education in alternative schools, number of community residents involved in specific programs, etc. On the other hand, individual donors (community residents) may be more persuaded with emotional appeals, thus fitting the category of high involvement-feeling. The creative approach with this group would be to focus on the emotions. Benefactors would need to hear sample stories of youth and families being helped by New Vision and remind them of how good it feels to do their part to help their community. Developing a feeling of community pride would be beneficial, not only to this group, but also with the high involvement-thinking group.

Table 2: The FCB Model (Lavidge & Steiner 1961)		
	Thinking	Feeling
High Involvement	Informative (thinking) Model: think-feel-do Creative: demonstration specific details	Affective (feeling) Model: feel-think-do Creative: execution impact
Low Involvement	Habit formation (doing) Model: do-think-feel Creative: reminder	Self-satisfaction (reacting) Model: do-feel-think Creative: attention

B. A Hierarchy of Effects model such as the AIDA (awareness, interest, desire, action) model is relevant (Leckenby 1976). New Vision is experiencing a low level of awareness among most of its target audiences. Prior to moving someone to the "action" stage of donating money or of directly calling New Vision for counseling services, they would need to move through each of these stages. A discussion of the message strategy approaches for each of these stages could ensue.

4. What marketing strategy recommendations would you offer New Vision?

- Hire a consultant or full-time marketing professional who will set feasible short- and long-term goals.
- Marketing research should benefit the organization in better understanding the needs/concerns of its target audiences.
- *Target audiences:* Better identification of individuals and groups such as Clients from the secondary market (referral market); clients from the primary market (direct call to New Vision); referring agencies; individual donors; constituency support groups.
- *Product:* Focus on where most of their business is….in youth counseling, family counseling and psychiatric counseling. Continue development of innovative programs to effectively serve clients. Evaluate programs and services in terms of desirable performance indicators to better understand which programs/services should be maintained for the long term.
- *Price:* For Clients: Continue acceptance of multiple forms of payment: insurance fees, Medicare, Medicaid, school district payments, credit card payments, etc. Continue competitively priced programs and counseling fees. For donors: Establish categories of donations such as $500 - "Friend" level; $1000 - "Partner" level; $5000 - "Star" level, etc.
- *Distribution:* Continue quick response time to clients; continue offering services in a location suitable and desirable to the client (i.e., in-home services). Also expand services offered in satellite offices.
- Integrated marketing communications:

a) *Brand Identity*: The name could be changed to be more reflective of the agency's services such as New Vision Counseling. The slogan could tie in with the name, focusing on their major services to youth and families.
b) *Message strategy:* For clients and most individual donors/community residents, use an emotional approach, sharing sample stories of youth and families helped. For referring agencies and constituency support groups with evaluative criteria, provide measurable performance outcomes.
c) *Visual:* Provide similarities of visual images by using the logo on all materials. Select one or two colors for use in all communication. Could purchase stock pictures of children and families being helped, rather than making use of pictures of existing clients.
d) *Verbal:* Make use of the slogan in all communication.
e) *Sound:* For radio and TV: Could obtain a jingle or distinctive voice.
f) *Attitude*: Draw upon the emotions of the need to help youth in crisis, the hope that can be brought to families in need.
g) *Media strategy:* Can involve traditional sources of media: brochures, newspaper, radio, television, and yellow pages. Yellow Page ads had not been used by the company and would especially be relevant to the primary market. Also, include newsletters to donors and referral agencies; website with appropriate links; speakers' bureau; school presentations; sponsorships of youth activities; develop an annual fund-raising event; develop a donor's brochure/booklet.

EPILOGUE

New Vision was so effective in obtaining clients from the referral market that they did not feel the pressure to develop a marketing communications campaign aimed to the primary market. They did not even have an ad in the Yellow Pages. However, the need for public awareness became evident when they desired to expand and have a capital fund drive.

The company changed its name to New Vision Counseling to be more reflective of their services. They also developed a slogan for use in all their marketing communication. They started focusing on the three major services offered, developing these to a higher level. They hired a graduate from a local university to serve as their marketing coordinator. They started advertising regularly in local newspapers, developed public service announcements, and appeared on TV and Radio "talk show" programs. They also applied for United Way grants as a way to raise funds and also obtain more awareness in the communities served. The verdict is still out on acquiring potential donors through the use of Missouri tax credits.

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ECAMPUS.COM: AUGUST CRISIS

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CASE DESCRIPTION

The case illustrates the problems resulting from getting the website created and operating on a time schedule that did not allow sufficient time for thorough testing or for developing a disaster plan and backup systems. The case also illustrates the importance scalability, redundancy, volume testing, telecommunications bandwidth availability and business site selection for e-commerce businesses. The case can be used to highlight e-commerce success factors of creating and maintaining flexibility in technology, getting the technology right, understanding the Internet culture and flexibility in managing e-commerce web sites. The case describes a critical incident that occurred during the first month of operation. This case is suitable for both graduate and undergraduate information systems and e-commerce classes. It has a difficulty level of four. The students should be prepared to spend from six to twelve hours outside class analyzing the case depending on the breadth and depth of the analysis.

CASE SYNOPSIS

Ecampus.com was created to provide e-commerce services and products in all four quadrants of the e-commerce spectrum, i.e., business-to-business (B2B), business-to-customer (B2C), customer-to-business (C2B) and customer-to-customer (C2C). It is a privately-owned Delaware corporation with headquarters in Lexington, Kentucky. The company was created in January 1999, incorporated in April and went "live" on the Internet on July 2, 1999. Ecampus.com is a "re-intermediation" electronic commerce business that pursues a value-added mission of providing the "easiest, fastest, cheapest way for college and university students to buy textbooks and stuff." It offers the largest online college textbook inventory on the Internet with more than 2.8 million book titles from more than 30,000 publishers. Approximately 900,000 titles are available for immediate shipment. All textbook orders are shipped free of charge in the U.S. and they ship about 80% within one to two days.

In mid August, when fall semester begins for many U.S. colleges and universities, the Ecampus website was deluged with more traffic than its system could handle. However, after a week of retooling, the crisis was resolved and it soon became one of the twenty busiest web sites in the world. Ecampus.com averaged 955,000 unique visitors per month during its first five months of operation. Of these visitors, 14% made a purchase, which is about three to four times greater than the top e-commerce web sites. In the second half of August 1999, the Ecampus.com site attracted nearly 500,000 visitors a week, with as many as 5,600 simultaneous visitors. Within four months, Ecampus.com had achieved an 80 percent brand awareness among U.S. college students.

Details of the problems that occurred during their first ordering season and the company's response to the crisis. A description of information technology architecture of the business is provided. After studying the case, students should be able to (1) better understand the technology used in an e-commerce website, and (2) identify requirements for planning, developing and managing an e-commerce website.

INSTRUCTORS' NOTES

This case is suitable for an advanced undergraduate or graduate MIS/CIS, e-commerce, telecommunications or systems management course. The technical aspects of the case require some background in management information systems, especially exposure to telecommunications and Internet technologies. Students should spend 6-10 hours of study to understand the management and technical issues of the case. They will require more time if required to understand the technical aspects of the case, e.g., Exhibit 1. Students should visit the Ecampus.com website, if it is still in business. The site contains excellent information about the history of Ecampus, its mission, policies and news releases. Class discussions of this case will take 1-3 hours depending on the scope and depth the instructor desires.

The teaching objectives of the case are to understand the importance of contingency planning in the design and construction of an e-commerce information system. Issues addressed include web site scalability, redundancy, volume or capacity testing, and back up and recovery planning. Also, the case illustrates the importance of bandwidth access in the site location decision.

DISCUSSION QUESTIONS

1. Why was Ecampus unprepared for the August crisis?

The rush to get online and to market quickly forced Garvin to cut corners in the delivery phase of systems development. Validation testing of the system was still being conducted when Ecampus went "live" with a mostly untested beta version on July 2. The original plan was to go "live" with a tested version on July 31, but Wilkinson moved the date to July 2 to coincide with the birthday of investor Dave Thomas, CEO of Wendy's, Inc. A large media event was held for the rollout of the Ecampus website with the local newspaper and television stations present.

The testing of the beta version of the web site was not completed until mid August. Even then, a more thorough testing of systems performance, processing capacity, interface testing, methods and procedures tests, and backup and recovery systems were needed. These tests are essential to ensure all the components (i.e., hardware, software, networks and telecommunications) work together, identify bottlenecks in the system and to measure system response time at varying traffic volumes. Peak workload processing performance is done to find out whether the system can satisfactorily handle the expected peak traffic volume, and to find the level at which performance degrades to an unacceptable level. Estimates of peak volume for retail e-commerce businesses were usually "best guesses" during the early days of e-commerce. Students should be reminded that e-commerce is a new phenomenon that started about 1996. Thus, when Ecampus went online in 1999, it was in a new frontier. Consumer purchases on the Internet had been increasing at rates of 50% per year from 1996–98. Ecampus was the first e–tail web site to be caught off guard by the sudden popularity of buying on the Internet that sprang up in the fall of 1999. The predicted growth in Internet sales for the holiday season of 1999 ranged from 70% to 100% over the previous year. However, Internet sales increased about a 300%! The web sites for companies, such as kbtoys.com and ToysRUs.com, were overwhelmed by more traffic than their systems could handle. Just like Ecampus, these sites had to be shut down and retooled in a matter of days. Like Ecampus, many sites also switched their network operating system from Windows NT to a Unix-based system to improve the reliability and scalability of their systems.

Ecampus did peak load testing using traffic volume assumptions that turned out to be too low. As Doug Alexander stated, ". . . no one could have predicted it." Contingency theory from the field of management holds that under conditions of uncertainty, organizations tend to imitate others that appear to be successful.

The 362 simultaneous process limitation in the Oracle Application Server beta software was unknown by both Garvin and Oracle technicians.

Doing a good job of developing and testing backup and recovery systems and procedures takes a lot of time. Because of the rush to get online, they cut corners. Certainly, Garvin knew that they needed a backup power supply, but there simply wasn't time to deal with it because Wilkinson had set an unrealistic deadline.

2. What do the terms reliability and scalability mean? What did Ecampus do to improve the reliability and scalability of its website?

Scalability refers to the ability to increase the processing capacity of a computer or network hardware or software component. Ecampus failed to provide scalability in two critical components: the web servers in the server farm and the server farm network operating system. The biggest problem with the Compaq Proliants was that they could not be scaled up by adding more processors. Adding more processors to the farm meant adding more servers. However, adding more servers required completely shutting down the website and reinstalling Windows NT, since NT did not support "slip stream" upgrades.

Garvin solved the scalability problem by switching to the Unix-based Solaris operating system for the server farm. Solaris provides full "slim stream upgrade" capabilities so additional processors can be added to the web servers, or additional servers added to the farm without shutting down the network or reinstalling the operating system. The server farm was increased from four to fifteen servers, and each server could be upgraded to sixteen processors by simply plugging them into the motherboard.

Students could be instructed to visit web sites, such as http://unix-vs-nt.org for more comparisons of Windows NT and Unix-based systems. The Kirch Report at this site is especially good. Generally, I.S. managers rate NT lowest on reliability, scalability and system management in comparison to various several unix-based systems.

3. E-campus leased their hardware, instead of purchasing it. How did this affect their response to the crisis?

Leasing allowed flexibility and speed in responding to the unexpected capacity demands. By leasing the equipment, Ecampus could ask the vender quickly deliver and replace the original components with ones that are faster and have higher capacity. If Ecampus had purchased the equipment, they would have lost their investment in them minus any salvage value and would have had to invest in buying new equipment.

4. What advice would give to an upstart company that wants to get into e-commerce?

Build for flexibility, lease as much as possible, take time to conduct systems performance testing, and have a complete and fully tested backup and recovery plans that includes a backup electrical power source. Spend a lot of time identifying the weaknesses and risks in your technology; predicting consumer demand because it affects your normal and peak load traffic. Build capacity for much more traffic than your maximum expectation. Some managers use a rule of thumb of having three times more capacity than the expected peak load. Develop problem response and contingency plans. Do an excellent job of determining advertising and promotion effectiveness. Understand your potential customers and what they expect from your website in terms of performance, ease of use and content. Maintain a high degree of flexibility in hardware, software, operating systems and telecommunication services technology to be able to respond quickly to sudden changes in traffic levels and new technology. Be sure to get the technology right the first time: the right hardware components, operating systems, etc. understand the Internet culture in creating and managing the e-commerce web sites.

Make sure your network software and hardware are stable under unexpected heavy loads. Use a network operating system that is scalable and stable. Be sure your local telecommunications service providers have enough bandwidth for your needs. If not, the business should consider locating the Web site operations at a place with greater bandwidth available. Maintain regular contact with vendors and telecommunication company representatives so you know what is new or coming soon.

5. Why is bandwidth access an important consideration in site selection for large electronic commerce businesses like Ecampus.com? What role should bandwidth access play in the site location decision?

Bandwidth refers to the size or the data transmission capacity of the telecommunication lines or the size of the data "pipes." The higher the bandwidth, the faster data is transmitted. Like a water pipe, the fatter or wider the pipe, the more water that can flow through in one second.

Bandwidth is an important factor that must be considered in choosing a location for an e-commerce operation because the business will be dependent on the flow of data coming into and going from its site. The data pipes that connect the electronic store front to the Internet can affect website response times, customer satisfaction, volume of traffic the firm can receive and even the scale of the business. It is vital that the pipes are large enough to handle the peak traffic without degrading system performance, especially response times, and to allow the business to grow, rapidly if necessary. As was the case with Ecampus, the volume of business was constrained by the bandwidth or pipes connecting Lexington to the Internet.

6. Discuss the reasons Ecampus was located in Lexington? What are the advantages and disadvantages of being there?

The decision to locate the store front operations off the Internet backbone was based solely on the proximity to the WCTC distribution center. They gave inadequate consideration to the bandwidth needs because Ecampus, if successful, was expected to follow a normal growth pattern of starting small and growing gradually over a 2-3 year horizon.

The decision was reasonable and prudent given the short history of e-commerce. Students should be reminded that what happened to Ecampus was a new phenomenon and that the rule of thumb for e-commerce businesses at the time was to start small and grow as sales increase. However, Ecampus hit its second year sales goal two months after going online. Locating in Lexington would have worked out okay if the traffic volume and growth rate of the business had been as predicted. Even if Ecampus had grown at the predicted rate, eventually it would have had to face the problem of insufficient bandwidth.

The problem of too little bandwidth was exacerbated by the asymmetry between the amount of downstream data received and the upstream data to be sent out from a web site. In other words, the number of bytes transmitted to request a web page is much smaller than the number of bytes in the web pages transmitted to the visitor. Thus, requests for web pages created a bottle neck at the Ecampus.com Web site in which the downstream requests came in faster than their system could process and ship out the Web pages. A fatter pipe was ,needed but was not available in the Lexington area.

The highest speeds and greatest bandwidths are on the backbone of the network and these higher capacities are available to telecommunications carriers in areas near the backbone. Telecommunications common carriers and value-added carriers often provide narrower bandwidths. At the time Ecampus.com was created, only DSL and T1 lines with maximum speeds of 1.544 Mbps and T3 lines with 44.736 Mbps were available in Lexington. If an e-commerce business needs higher speeds, it will need either multiple T1 or T3 lines, or an OC-3, OC-12, OC-48, OC-96 or OC-192 line to provide sufficient bandwidth. For E-commerce sites that have difficulty in predicting peak load demands, being able to expand bandwidth quickly, or to move the front end operations to where sufficient bandwidth is available, are essential.

7. Analyze the costs estimates for the two options identified by Jack Garvin. Discuss the advantages and disadvantages of each option. Are there other options that were not identified?

In this case, Option two is the best choice. It offers the advantage of: being quick and inexpensive to set up; allows for the long-term and almost unconstrained growth in web site traffic. The fatter pipes will enable faster verification of credit card transactions and faster web page loading speed for the customers. With this option, the existing Lexington site could be used as a mirror site for databases, applications, web pages if the primary front-end site gets knocked off the Internet because of a power outage or natural disaster, or damaged by hackers or viruses. Employees would not need to be moved or replaced. The disadvantages include: higher telecommunications or data transmission costs to send order data to distribution (i.e., order fulfillment) warehouse in Lexington since T-1 and T-3 charges are based on distance of transmission (T3 services can be purchased as full, fractional and flexible capacities); creating a dependence on the out source company and the quality of its operations and its financial health.

Option one would be a short-run solution at best. Adding more T1 lines, that cost about $600/month each. At best, Ecampus will only delay moving to an Internet hub site if the company is to grow. Using a T3 line, which is equal to about 29 T1 connections, to connect Ecampus to the Internet might provide sufficient bandwidth for two or three years. During that time, the pipes serving Lexington might be upgrade, but there is a risk that it would take longer. This solution has the advantage of maintaining proximity to the WCTC warehouse for transmitting orders and shipping information; there would be no need to move employees and there would be no dependence on an external host provider.

A third option might involve moving the entire Ecampus web operation and personnel to a hub location. This would be much more expensive than Option two and provide no additional benefits, except not creating a dependence on a web host service provider.

Table 1 Cost Estimates		
Option 1		
	Estimated First Year Incremental Costs	Total Cost
Additional web servers lease	$ 120,000	
T3 cost	$ 180,000	
4 new employees	$ 300,000	$ 600,000
Life expectancy	1 yr.	
Option 2		
Host Service costs	$ 300,000	
T3 costs	$ 180,000	$ 480,000
Life Expectancy	unlimited	
Estimated Next Year Sales		
Predicted Web Visitors	30,000,000	
Conversion Rate	14%	
Average Sale	$ 100	
Expected Sales		$ 4,200,000

WYETH PHARMACEUTICALS: AN EQUITY VALUATION CASE

James Stotler, North Carolina Central University

CASE DESCRIPTION

The primary subject matter of this case concerns equity valuation of a large corporation using various valuation approaches. Secondary issues include sensitivity analysis, DuPont analysis and evaluation of competitive conditions in the industry using Porter's five force model. The case has a difficulty level of three and is most appropriate for senior level courses. The case is designed to be taught in two classroom hours and is expected to take two or three hours of outside preparation by students.

CASE SYNOPSIS

The student is placed in the role of an equity analyst and asked to prepare a buy or sell recommendation for Wyeth Pharmaceuticals (NYSE: WYE) stock. WYE is primarily a pharmaceutical company with operations in the areas of human ethical pharmaceuticals, consumer health care, animal health care and agricultural products. Recently, the price of WYE stock has been volatile and the company is under pressure from competitive forces within the industry. The student must assess the competitive environment of WYE using the DuPont identity and Porter's five force model of competitive strategy as well as estimate the value of WYE stock. All information in the case is historical and publicly available.

INSTRUCTORS' NOTES

The primary subject matter of this case concerns the valuation of the common equity for a large corporation. Secondary issues identify industry conditions by using Porter's Five Force Model and the financial strengths and weaknesses by using the Dupont identity. The case has a difficulty level of three (appropriate for junior or senior level courses). The case is designed to be taught in one and one-half classroom hours and is expected to take two or three hours of outside preparation by students.

This case raises related issues in stock valuation such as:

1.	Capital Asset Pricing Model
2.	Dividend-Discount Model

3.	Beta
4.	Risk-free rates
5.	Expected Return on market portfolio

Skills to develop include:

1.	Industry and competitive analysis
2.	Stock valuation methods
3.	Financial analysis

Subject areas to explore:

1.	Financial Markets and Present Value
2.	How to Value Stocks
3.	Strategy and Analysis Using Present Value
4.	Analyzing Industry's Competitive Forces

TEACHING PLAN

Initial class discussion should identify Porter's five competitive forces and the strength of these pressures. Instructors can organize class discussion to address the following questions:

DISCUSSION QUESTIONS

1. What are the main sources of competitive forces and the strength of these forces?

The goal of this segment is to gain an understanding of the components of Porter's Five Force Model. Competitive forces are important because to be successful, strategy must be designed to cope effectively with these competitive forces. The objective must be to build a strong market position based on competitive advantage.

INDUSTRY ANALYSIS OF COMPETITIVE FORCES

To be successful, a firm's strategy must be designed to cope effectively with Porter's five competitive forces. A firm's objective must be to build a strong market position based on competitive advantage! A strong market position based on competitive advantage is one factor that can lead to an appreciated stock price.

THE FIVE COMPETITIVE FORCES

1. RIVALRY among competing sellers in an industry.
2. Bargaining power of SUPPLIERS.
3. Bargaining power of BUYERS.
4. Competitive force of SUBSTITUTE products.
5. Competitive force of potential BARRIERS TO ENTRY.

RIVALRY AMONG INDUSTRY COMPETITORS

The rivalry among industry competitors is usually the most powerful of the five competitive forces. The weapons of competitive rivalry are:

Price
Quality
Performance features offered
Customer service
Warranties and guarantees
Advertising & special promotions
Dealer networks
Product innovation.

A powerful competitive strategy launched by one firm intensifies competitive pressures on rivals! Competitive jockeying among rival firms is a dynamic process as firms initiate new offensive & defensive moves, and emphasis swings from one mix of competitive weapons to another.

For WYE, the high level of investment in research and development required to discover patent protected pharmaceutical products and maintain a strong R&D pipeline constitute significant competitive factors. The introduction of generic drugs can significantly reduce WYE's profit margin on a drug following patent expiration. As a result, maintaining a strong pipeline of new products is a key competitive factor in the industry.

What causes rivalry to be stronger?

Lots of firms, equal in size and capability,
Demand for product growing slowly
Industry conditions tempt firms to use competitive weapons to boost volume
Switching costs incurred by customers are low
A firm initiates moves to bolster its standing at expense of rivals
A successful strategic move carries a big payoff
Costs more to get out of business than to stay in, high exit barriers from the industry
Firms have diverse strategies, corporate priorities, resources, & countries of origin.

WYE competes internationally with a number of pharmaceutical companies. The primary form of competition in this area is in the form of new drug development and marketing. Additional competition is from generic drug makers once patent expiration occurs. Consumers can switch between WYE and generics with no cost for switching.

Rivalry is moderate in the pharmaceutical industry.

COMPETITIVE FORCE OF SUPPLIERS' BARGAINING POWER

Whether suppliers are a strong or weak competitive force depends on whether they have bargaining power to put their rivals at a competitive disadvantage based on:

Prices they can command
Quality & performance of items supplied
Reliability of deliveries
Other terms & conditions of supply.

Suppliers are a strong competitive force when:

Suppliers' product makes up a large portion of the cost of a product, the suppliers' product is crucial to production process, and/or the suppliers' product significantly affects product quality,
It is costly for buyers (WYE) to switch suppliers,
Suppliers have good reputations & growing demand for their product,
Suppliers can supply a component cheaper than industry members can make it themselves,
Suppliers do not have to contend with substitutes,
Buying firms are not suppliers' important customers.

The basic ingredients in most of WYE's products are available from multiple sources. Quality and purity of the product is an important issue. As a result, the bargaining power of suppliers in the pharmaceutical industry is low to moderate and is not the primary factor affecting profit margins. The company believes that their principal industry competitors are facing similar situations with respect to suppliers bargaining power..

Suppliers are in a low to moderate bargaining power position in the pharmaceutical industry.

COMPETITIVE FORCE OF BUYERS' BARGAINING POWER

Buyers become a stronger competitive force the more they can exercise bargaining leverage over:

Price
Quality
Service
Other terms & conditions of sale.

Buyers are a strong competitive force when:

They are large & purchase a sizable percentage of industry's product
They buy in volume quantities
They incur low costs in switching to substitutes
They have flexibility to purchase from several sellers
Selling industry's product is standardized
They can integrate backward
Product being purchased does not save buyer money or has low value to the buyer.

The bargaining power of buyers in the pharmaceutical industry is generally considered to be low. In general, consumers have very little control over the price they must pay for a prescription drug. However, recent trends have given a growing amount of power to health maintenance organizations (HMO's) who represent a large number of prescription drug users. This represents a threat to the pharmaceutical industry. Prescription drug coverage and pricing is also a popular political issue and upcoming elections could be the catalyst for an increase in buyers' bargaining power.

Customers are in a low to moderate bargaining position in the pharmaceutical industry but there is the potential for a rapid increase in their bargaining power..

COMPETITIVE FORCE OF SUBSTITUTE PRODUCTS

Substitutes matter when products of a firm in another industry enter the market picture. Competitively priced substitutes can place a ceiling on prices firms can charge for its product. Price ceiling can place lid on the profits that industry members can earn.

The indicators of strength of substitute products are:

Growth rate of sales of substitutes
Market inroads of substitutes
Plan of manufacturers of substitutes to expand capacity
Profits of firms producing substitutes.

The pharmaceutical industry is somewhat unique with respect to substitute products. Since the development of a new drug is very time consuming and requires a large investment in R&D, the products developed are covered by patent protection to allow the developers to recover R&D costs and earn a profit. The patent protection provides the company some protection from substitutes, but the threat of generic substitutes is a competitive threat in the industry.

The competitive threat of substitute products is strong when:

Prices of substitutes are viewed attractive by buyers
Buyers' costs of switching to substitutes are low
Buyers view substitutes as having equal or better performance features.

There are few good substitutes in the pharmaceutical industry, thereby making the threat of substitutes a neutral force.

COMPETITIVE FORCE OF POTENTIAL ENTRY

New entrants boost competitive pressures by bringing new production capacity into play through their actions to build market share. The seriousness of the threat of entry depends on the barriers to entry and the expected reaction of existing firms to entry.

WYE competes internationally with a number of large pharmaceutical companies. These companies face a relatively low threat of entry by new competitors due primarily to the very high cost of research and development required to bring a new pharmaceutical product to the market. In addition, much of the existing research is proprietary in nature and not shared among companies for competitive reasons.

The barriers to entry exist when it is difficult for newcomers to enter the market. Common barriers to entry are:

Economies of scale
Inability to gain access to specialized technology
Existence of learning/experience curve effects
Brand preferences and customer loyalty
Capital requirements
Cost disadvantages independent of size
Access to distribution channels
Regulatory policies
Tariffs & international trade restrictions.

The three main sources of barriers to entry are brand loyalty, absolute cost advantages, and economies of scale. When existing firms show they will aggressively defend their position, have substantial resources to wage defense, and can use leverage with customers to keep their business, then potential entrants are likely to be discouraged by prospects of a costly struggle and strong threat of competitive retaliation that makes entry barriers higher.

SUMMARY OF COMPETITIVE FORCES:

Competitive threat of outsiders entering a market is stronger when:

Entry barriers are low (they are relatively high for WYE)
Incumbent firms do not vigorously fight newcomers (WYE can vigorously fight newcomers)
Newcomers can expect to earn attractive profits (patent protection may allow for high profits)

Competitive environment is unattractive when:

Rivalry is very strong (rivalry is very strong in the R&D area in this industry)
Entry barriers are low (entry barriers are relatively high in the pharmaceutical industry)
Competition from substitutes is strong (threat of substitutes is primarily from generics)
Suppliers & customers have considerable bargaining power (moderate for suppliers and low to moderate for customers)
The weaker the competitive forces, the GREATER an industry's PROFITS! A company whose strategy and market position provide a GOOD DEFENSE against the five forces can earn above-average profits even when some or all of the five forces are strong!

The objective is to craft a strategy that will:

Insulate the company from competitive forces,
Influence the industry's competitive rules in your company's favor,
Provide a strong position from which "to play the game" of competition,
Help create sustainable competitive advantage.

In the case of WYE, the competitive environment is moderately attractive. Competitive forces which contribute to an attractive environment for WYE include relatively high entry barriers, relatively low threat of substitutes, and moderate supplier bargaining power. Competitive forces which contribute to a potentially unattractive environment for WYE include a strong competitive rivalry in the industry and moderate but growing buyer bargaining power.

VALUATION ANALYSIS

2. What is the expected return for WYE stock?

The goal of this segment is to calculate expected return for WYE stock. Applying the Capital-Asset-Pricing Model can derive the expected return for WYE stock. The Capital-Asset-Pricing Model formula is as follows:

$$R_E = R_F + \beta * (R_M - R_F)$$

where:

R_E - Expected return on a security (WYE)
R_F - Risk-free rate (30-year government bond yields)
β - Beta of the security (WYE): the measure of the sensitivity of a security's return to movements on an underlying factor (the S&P 500). It is the measure of systematic risk.
R_M - Expected return on the market (The S&P 500)

The expected return for WYE:

$$R = .051 + .8(.12 - .051) = .106$$

3. Calculate the Dupont analysis of return on equity for WYE.

The goal of this segment is to highlight the importance of the return on equity (ROE), and its relationship to the Dupont identity. Dupont Identity:

ROE = (Profit margin * Asset turnover) * (Equity Multiplier)
= ROA * EM
Dupont Identity Financial Leverage

$$0.561 = (.205) * (.799) * (3.423)$$

The Dupont system of financial control highlights the fact that return on assets can be expressed in terms of the profit margin and asset turnover. The most important difference between return on asset and return on equity is due to financial leverage. Financial leverage can magnify return on equity when return on asset (gross) is greater than interest rate on debt.

WYE has a profit margin which is somewhat higher than the industry average. A low profit margin can be indicative of cost control problems. Cost control difficulties can arise from excessive interest expense, operating expenses or cost of sales. In the case of WYE, this suggests that costs are in line with competitors and the industry.

The asset turnover of WYE is lower than the industry average which is a disadvantage for WYE in this case. This could indicate that WYE holds inventory and accounts receivable for a longer time than its competitors or that WYE is carrying some inefficient or unproductive assets on its balance sheet..

4. What is the value estimate for WYE stock using the constant growth model?

The goal of this segment is to calculate the value of WYE stock using the Constant Growth Model. The formula for the constant growth model is:

$$\frac{\text{Div}}{(d - g)} = \text{the stock value}$$

Div - the expected dividend (the next expected dividend)
d - the discount rate (as determined by the Capital Asset Model)
g - the growth rate (as determined by the historic compound annual growth of earnings)

$$g = [(1.72/1.28).20] - 1 = 0.0608 \quad \text{or } 6\%$$

In reality, the historical 5 year growth rate may or may not continue in the future. In the absence of any information indicating that the growth rate will differ in the future, the 5 year historical growth rate serves as a reasonable estimate of the expected growth rate.

Using a 6% projected growth rate for the foreseeable future:

$$P_0 = \$.92 / (.106 - .06) = \$20$$

5. What is the value estimate for WYE using a Price/Earnings valuation approach?

The goal of this segment is to calculate the value of WYE stock using the Price/Earnings valuation approach. This approach uses the earnings per share and the price earnings ratio. The formula is as follows:

$$EPS * P/E = \text{stock value}$$

$$\$1.72 * 12.1 = \$20.81$$

6. What is the value estimate for WYE using the two stage Dividend Discount Model (DDM)?

5 year projection: $EPS_5 = \$1.72 * (1 + .06)^5 = \$2.30$ **if g=.08, P5=30.57
**if g=.04, P5=25.32

$$P_5 = 12.1 * \$2.30 = \$27.83$$

The goal of this segment is to calculate the value of WYE stock using the Dividend Discount Model (DDM). The discount rate is 10.6%. The formula for the DDM is:

$$P_0 = PV(D_1) + PV(D_2) + PV(D_3) + PV(D_4) + PV(D_5) + PV(P_5)$$
$$20.64 = PV(.92) + PV(.975) + PV(1.03) + PV(1.10) + PV(1.16) + PV(27.83)$$

7. What is the sensitivity analysis for WYE value using the two stage dividend discount model?

The goal of this segment is to analyze the sensitivity of WYE stock to various growth rates. The tables reflect the assumed price of WYE stock in year 5 and the various alternative values of the stock in year 0. The year 5 price estimate is varied by +/-10% and the discount rate and growth rate are varied as follows:

Discount rate = .106 +/- .01
Growth rate = .06 +/- .02

Assuming P5 = $50			
	9.6%	10.6%	11.6%
8%	35.68	34.17	32.74
6%	35.55	34.04	32.62
4%	35.41	33.91	32.49
Assuming P5 = $27.83			
	9.6%	10.6%	11.6%
8%	23.40	22.43	21.52
6%	21.52	20.64	19.80
4%	19.80	18.99	18.23

Assuming P5 = $20			
	9.6%	10.6%	11.6%
8%	16.72	16.05	15.41
6%	16.58	15.91	15.28
4%	16.44	15.78	15.16

8. Prepare an overall recommendation (i.e., buy/sell) and explain your recommendation.

WYE stock appears to be overvalued based on nearly all of the value estimates obtained from the sensitivity analysis using the 2 stage dividend discount model in question 7. Only for the highest assumed estimate for P5 does the 2 stage DDM indicate undervaluation. The stock is also overvalued based on the Price/Earnings valuation approach. Overall, WYE stock appears to be overvalued at a price of $31.

This overvaluation could be exploited by taking a short position in WYE stock or purchasing put options on the stock.

FROM RUSSIA WITH LOVE: UPDATE.COM AND THE CYBER MAIL-ORDER BRIDE INDUSTRY

Charles A. Rarick, Barry University
Gregory S. Winter, Barry University

CASE DESCRIPTION

The primary subject matter of this case concerns the cyber matchmaking industry. A secondary issue is one of business ethics in this very personal business. The case has a difficulty level of four. The case is designed to be taught in two class hours and is expected to require two hours of outside preparation by students.

CASE SYNOPSIS

This case explores the business practices of an explosive growth industry, personal introductions over the Internet. The case details the business practices of Udate.com and its subsidiary, Kiss.com and examines the problems and opportunities found in the cyber matchmaking industry.

This case examines the mail-order bride industry and one company specifically, Udate.com. Demand is examined from the perspective of both the women who are mostly Russian and the men who are mainly American. From the Russian perspective times are very hard with little prospect of getting better. It is easy to understand why a Russian woman would like to marry a westerner and move away. It is less clear what the attraction is from the perspective of the American men. Most are employed professionally and college graduates. There is evidence that some may want a relationship they want to control. If so they may be in for a rude awakening since Russian women are reputed to have "claws of steel and an iron will" and may not be that easy to dominate and control. There is certainly the concern that the women are using the men as vehicles to the west and will abandon them once they are able to get a permanent visa. In any case the likelihood is that conditions in Russia will not improve in the short run and consequently the availability of women should continue for the foreseeable future. The level of success found in marriages between Russians and Americans remains to be seen although the lack of success between Americans is a known fact.

Competition in this industry is likely to be intense as the barriers to entry are low. It would seem that the best direction for firms in this industry is differentiation. By specializing in some way and providing a unique experience for the customer (the men) firms can hope to attain and maintain profitability. It may also be true that men may be members of more than one service to maximize the number of potential mates from which to select. To the extent to which this is true competition will be less intense.

Udate.com needs to continue to make itself unique as it has with the technology it uses to match prospective mates. It may be advisable to vertically integrate into organizing trips for the men to Russia to meet prospective brides. Examining second quarter financial data year over year shows a marked increase in revenue but also expenses. It should be noted that the company has achieved a positive cash flow and is not in immediate danger of going out of business. In the future, the ability to control costs as revenues increase will be a very important task for the company.

It is very important to keep the ethical dimension in mind in this business. There is plenty of latitude for both parties to take advantage of the other. It would seem prudent for the firm to do at least some background screening. Another idea would be to make marriage counseling available over the web for each couple. This could also be used a sa way to produce revenues.

Maintenance of a user-friendly web site is critically important. This is where the bulk of expenses the company incurs arise. Trying to keep up with the competition may result in an escalation of expenses industry wide. Some way needs to be found to keep these expenses down.

Additional revenue sources need to be found as well. Advertising on the site and selling market research information on their members have already been mentioned (keep in mind that selling market research information on members has its own ethical dimension).

It is a natural thing for the company to vertically integrate. It should cultivate relationships in Russia with the idea of bringing men over to meet Russian women. Relationships with airlines, hotels and those providing on site services (such as food or motor transport) should be fostered. This allows the firm to arrange "one stop shopping" for its members. This should tend to maximize the revenue stream per member.

DISCUSSION QUESTIONS AND SUGGESTED RESPONSES

1. What are the strengths, weaknesses, opportunities, and threats of Udate.com?

Strength- proprietary technology
Weakness- Potentially heavy competition
Opportunities- Possible vertical integration
Threat- Other firms may also vertically integrate

2. Is this a viable business concept? Explain.

The viability of this business depends on a continued demand and supply for mail-order brides. Any major economic or political change could adversely the viability of this business.

3. Would you invest in Udate.com? Explain.

To invest in Udate.com is to invest in love as a business concept. The questions are will the firm maintain its uniqueness and will the business model pan out. Caution should be taken before investing in this business.

COHABITATION AND CONFLICT OF INTEREST IN A PUBLIC AGENCY: JUSTICE SERVED, OR POWER AND POLITICS AT WORK?

Duane Dove, Sonoma State University
Wingham Liddell, Sonoma State University

CASE DESCRIPTION

The case concerns an office romance in a government agency. Power and influence are exercised in a fashion that allegedly violates a state conflict of interest statute. Material in the case lends itself to discussion of a number of interesting human resource management and organizational behavior topics. These topics include sexual harassment, ethics, decision-making, power and influenced, and organizational political behavior. The case has a difficulty level of from three through six. It can be taught in 45 minutes. It is expected that preparation time for the case would also be 45 minutes.

CASE SYNOPSIS

The case explores a long existing situation in a public school district in a high socio-economic area. It involves the hiring of an individual in a human resource office, the subsequent establishment of a romantic relationship with the chief manager of that office, alleged preferential treatment of the subordinate, all amidst protests of an improper conflict of interest based on cohabitation and jointly purchase real estate by the two principals.

The "establishment" comes to the defense of the "embattled" couple in the face of state law that prohibits supervisors from taking actions in matters of personnel from which the supervisor might enjoy material gain. The case is unusual in that it is based to a great extent on public records and documents prepared by officials defending the alleged improper relationship. Decisions made by the School Board, Superintendent of Schools, and District Attorney are documented.

The decisions appear aberrant and imprudent in the current environment in which consensual relationships change quickly into coerced relationships exposing organizations that "knew or should have known" to extensive liability. A plausible explanation for the decision-makers behavior may lie in the power dynamics of the situation. Names of all people and places have been changed. Otherwise the case is entirely factual. All quotes are actual verbatim quotes obtained from available documents. Documentation is available for every attribution to any individual in the case.

INSTRUCTORS' NOTES

Case Objective and Use

The case demonstrates the exercise of power in a public agency, which arguably might be a clear violation of state law. The student is encouraged to consider the relative power of various participants in the situation, and the potential consequences resulting from alternative actions that could be taken by key individuals and groups. By considering the consequences of alternate decisions, students will better understand courses of action by decision-makers that ignored state law and exposed the organization to significant financial liability.

The focus of the case is not what should the decision-maker do, for that would seem to be a clear choice. Mature organizations commonly establish nepotism policies which preclude the appearance of inappropriate conflicts of interests. It is hard to image a law firm advising businesses that would not recommend such action. Rather the focus of the case is to try to understand repeated decisions which are counter to the best interests of the organization.

Objectives

- To stimulate consideration of political considerations in decision making.
- To stimulate consideration of the bases of power that an individual utilizes in influencing others.
- To stimulate consideration of unrecognized sources of liability as regards potential charges of sexual harassment.
- To stimulate development of students' analytic skills.
- To encourage students to analyze the reasons determining decisions as well as the quality of the decisions being made.

Audience

The case would be appropriate for courses in Organizational Behavior, Human Resource Management, or Business and Ethics, and would be appropriate for all adult audiences from under graduate to masters level. It could be used in conjunction with the study of power and influence, politics, decision making, ethics, or sexual harassment.

Suggested Readings

The Equal Employment Opportunity Commission "Guidelines on Sexual Discrimination" would help students understand the responsibilities of employers and the liability this situation poses. A chapter from an Organization Behavior text on power and politics would be valuable reading. The French and Raven framework on bases of power would be useful for readers to consider.

TEACHING PLAN

In preparation for the case, students should be made familiar with sexual harassment issues and associated employer liability, This discussion might include risk management strategies and organizational policies. Consider the possibility that consensual relationship may not remain consensual. A visit by an "employers" lawyer discussing the liability issues the class period following the case discussion would be interesting and informative.

Students should also be very familiar with the power analysis of French and Raven as well as related thought on power and politics.

DISCUSSION QUESTIONS AND SUGGESTED ANSWERS

1. Use the Raven and French power framework. Based on information in the case and reasonable inferences, speculate on the bases/sources of power Mr. Padget might have with various constituencies.

Padget has legitimate power with all groups by virtue of his position. There appears to be evidence that he has considerable coercive power with his immediate work group. By virtue of his long tenure in the school district he might have considerable referent power with the School Board. It is likely that he has expert power by virtue of his ability to seemingly get the Board to follow his recommendations.

2. Does the Rock Hill City School System face any unnecessary added liability as a result of the alleged office romance? Elaborate fully.

There are several sources of legal liability that would seem to be increased. There would always be the possibility that the relationship between Padget and Simril would turn sour. It is not unusual in the sexual harassment literature to read of consensual relationships turning into alleged coerced relationships. Were this to happen the School Board would be liable and would be forced to expend significant resources in defending itself.

It is also feasible that a lawsuit could be brought by a party charging the behavior of the Board in relation to Simile's promotions constituted sex discrimination under the 1964 Civil Rights Act. Reasonable nepotism rules prohibiting direct supervision by a person with a familial or dating relationship would greatly reduce the risk of expensive litigation.

3. Are the charges of illegal conflict of interest plausible? If so discuss possible reasons the School Board repeatedly implemented recommendations of Mr. Padget that benefited Ms. Simril.

The charges do appear to be plausible. The government code is clear: "No public official at any level of government shall make, participate in making or in any way attempt to use his official position to influence a governmental decision in which he has a financial interest." Also, other cases referred to in the case seem similar enough that the outcome in those would predict the outcome in the present instance. The cohabitation and the existence of jointly owned property would make it very difficult to argue that Padget had no financial interest in the recommendations he was making on behalf of Simril.

There is not enough evidence to speculate on the precise reasons for the Board's following Padget's recommendations. It does seem clear that he did have considerable influence over the Board which could relate to a number of different factors.

4. Analyze the correspondence between Ms. Ellis' attorney, Mr. Reese, and District Attorney Mike Cooper. Did you find either position compelling? Does anything seem anomalous to you? Discuss.

Mr. Reese's arguments seem to be factually based and logical. The deviation from usual District policy in regards to the recruitment timelines does little to assure us that the recommendation of Mr. Padget is not without bias. It also seems somewhat unusual that the District Attorney would accept at face value evidence presented by the supporters of Mr. Padget. The reader may be disappointed that the DA did not explain how or why he reached his conclusion.

5. Mr. Padget was alleged to have engaged in felonious conflict of interest activities. He was exonerated by the Office of the District Attorney. Offer rational explanations of the finding of the DA.

One explanation is that this type of situation does not violate the state conflict of interest law. If this is true, one must somehow reconcile other instances of conflict of interest in the case. Another explanation is that indeed as Mr. Reese declared the situation is a "hot potato". Why? We are left only to speculate. Another possibility is that Mr. Padget is a very influential man in the community, and people are inclined to follow his recommendations. A combination of the above factors might be operating.

6. Evaluate the investigation of Mr. Rogers. Was his report a vindication of Mr. Padget?

Mr. Rogers appears not to have addressed the issue of whether Mr. Padget's conduct violated the conflict of interest code. He interpreted his charge from the President of the School Board to be "find no conflict of interest". He complied.

7. Do you find it odd that Ms. Ellis' attorney permitted the School Board attorney to select the independent investigator to evaluate charges against the School Board?

We found this breach to be truly incredible. Surely it is either a sign of complete incompetence or a sign of political aspirations. It seems reasonable that if one has political aspirations, it would not be a good strategy to be too confrontational in dealings with community groups that might wield power.

8. From expert knowledge or personal experience, comment on the final search that elevated Ms. Simril to her final position.

A large public organization such as this would normally engage in Affirmative Action recruiting. The hallmark of such recruiting is to reach all qualified candidates and to operate a fair, comprehensive, and open search. Such searches would routinely be open for a minimum of 21 days. The search described would not be compatible with principles of an open and comprehensive recruitment. The cynical observer might conclude that Mr. Padget was taking as few chances as possible in recruiting competitive candidates.

9. Have you ever witnessed such a conflict? If so, what impact did it have on the work group?

It is likely that some may have seen similar events. One might speculate that such situations might be more likely in the private sector than in the public sector, because of generally closer scrutiny in public sector entities.

10. What are your general impressions regarding how various authorities handled the issue of the Padget/Simril relationship.

We have had a variety of responses to this question. Some express surprise that such events occur. Others express extreme cynicism and find this situation all too typical.

RISK-BASED LENDING AT PORTNEUF COLLEGE CREDIT UNION: A CASE STUDY

Robert J. Tokle, Idaho State University
Robert R. Picard, Idaho State University
Joanne Tokle, Idaho State University

CASE DESCRIPTION

The primary subject matter of this case involves cost and pricing issues arising from a risk-based pricing policy decision faced by a credit union. Secondary issues include activity analysis, design of data analysis, and ethics considerations involving potentially prejudicial lending practices. The case has a difficulty level appropriate for junior level students and is best taught in a 75-minute class period. Out of class preparation time is estimated to be 2 1/2 hours. This case primarily has been used in an Advanced Management Accounting course as an assignment in the cost allocation and activity based-costing module. It has also appropriate for a Money and Banking course.

CASE SYNOPSIS

Mark Murphy, Portneuf College Credit Union manager, championed the adoption of a risk-based lending policy for the institution two years ago. The institution's board of directors is now reviewing the effects of the policy and deciding whether to maintain the practice as is, alter the policy, or abandon it altogether.

Through risk-based lending, borrowers are charged rates based on their creditworthiness or default risk. The theory is simple enough - higher risk (cost) borrowers are charged higher rates. At issue, however, is whether the policy is contrary to the general credit union philosophy of one member, one vote, where all members are treated equally. Mrs. Cooper, a board member, supports the practice in concept but requests an analysis to determine whether the rate differentials established at the time the policy was implemented reflect the true differential costs of the related default risk categories. Mr. Kelly, another board member, vigorously opposes the practice and suggests that it masks price discrimination along ethnic or racial lines.

The board, agreeing that these are relevant and compelling issues, charges Mr. Murphy with preparing an analysis that addresses these concerns and asks him to report his findings back to the board.

INSTRUCTORS' NOTES

Teaching Objectives

The teaching objectives of this case are:

(1) to understand the concept of risk-based lending, and be able to discuss its advantages and disadvantages;
(2) to perform an activity analysis that highlights differential activities between classes of borrowers;
(3) to perform cost and statistical analyses and supporting exhibits appropriate for addressing specific concerns expressed by board members; and
(4) to illustrate the economic concepts of peak-load pricing and price discrimination.

Skills reinforced include:

(1) quantitative problem solving;
(2) critical thinking;
(3) written communication; and
(4) oral communication.

DISCUSSIONS AND SUGGESTED SOLUTIONS

1. Construct an activity flow diagram for PCCU's lending process and highlight those activities that are uniquely attributable to high-risk loans. How would you cost these activities? Are you satisfied with Mr. Murphy's allocation techniques? Why or why not?

Exhibit TN1 provides an example of a flowchart that might represent the lending process at a small credit union. The important aspect of this requirement is that students identify several activities that are only performed for delinquent or defaulting loans. Activity based-costing techniques would be most appropriate for determining resources consumed by these activities. You might want to ask students to sketch a three-stage allocation process that traces resources to activity pools and activities to risk classes (as a cost objective). You can then use this to reinforce the idea that the cost of performing an activity includes more than the labor cost of the person performing the activity and that the costs that would be traced to the delinquent or defaulting borrowers significantly increase the credit union's costs.

Arbitrary allocation of costs such as building and other fixed asset costs might distort the cost analysis since administrative facilities costs are a major cost element in loan monitoring and collection activities. This is also a good place to discuss the inappropriateness of allocating certain facilities costs, regardless of the method used.

Finally, the cost benefit trade-off between "more accurate" costs and "adequate" costs can be addressed at this point. Mr. Murphy's combining categories A and B and categories C and D because of the cost of data collection provides us with a point to return to as we move through the analysis. At the very least our analysis has shifted from a focus on individual risk categories to a focus on "higher" and "lower" risk loans.

2. Perform a data analysis with relevant charts and graphs that addresses Ms. Cooper's concerns. Include a Pareto diagram for delinquent loans by category. Explain the results of your analysis. [You might want to provide students with a grid to use as a framework for the data analysis. A blank grid is provided as TN 2a.]

Mrs. Cooper was concerned with whether the risk categories reflected actual delinquency and default risk and, if so, the interest rate differentials adequately covered the differential costs.

Exhibit TN 2 shows the average total costs of the risk-based scored loans as a whole and separated into the A/B and C/D categories. Inputs for Exhibit TN-2 include the total costs from case Table 6 plus the collection costs from case Table 3, which are used to calculate an operating expense ratio. Then, using the average cost of funds and the required contribution to reserves, we can determine the average total cost of scored loans to be 8 percent for the A/B scored loans and 9.9 percent for the C/D scored loans.

At 80% loan-to-value, the average difference of the A/B and C/D risk adjusted rates is 1.75% [((1% + 2%)/2)] - [((-.25% + 0%)/2)]. The actual average cost difference from Exhibit TN 2 is 3.3%. It appears that the interest rate spread could be increased by 1.55 percent.

Exhibit TN 3 illustrates the relationship between actual delinquencies and risk category. Exhibit TN 4 provides a reasonable example of the "80/20 rule" by showing that 70% of the delinquent loans are attributable to only the 25% of the loans that fall in the C/D risk categories.

It should be noted that in 1997, peer credit unions that had also instituted risk-based lending had an average interest rate spread of 4.8 percent. Most likely, few of these credit unions did any cost analysis to review their policies. The students could be asked to make their own recommendations for the appropriate interest rate spread.

3. Do you agree with Mr. Murphy's recommendation to continue with risk-based lending? Why or why not? Would you change the risk categories or the interest rate premiums for any category? Why or why not?

The discussion could include the advantages and disadvantages of risk-based lending, as well as how it fits within the mission of the credit union. These issues are addressed in the case.

More members potentially could be served under risk-based lending than under traditional lending. The "A" members get a discount rate, which makes the credit union's rate for them more competitive. Otherwise, some of these "A" loans could be lost to competitors. They would no longer be subsidizing the higher-risk loans. Some "D" members get loans they may have been shut out of previously. By charging a higher rate the credit union can take on more risk, and hence make more loans to the higher-risk borrowers. Even though the "D" group is paying a higher rate, the rate they pay is still much lower than most alternative financing they may have access to, like finance companies and payday check-cashing companies that can charge 500% per year or more.

The cost analysis performed in requirement 2 supports the practice from a cost perspective. In fact, the analysis supports a 1.55% increase in the rate spread.

4. What type of statistical analysis could you perform to address Mr. Kelly's concern? Identify the specific statistical test(s) and list the variables you would need to perform the test. Do you suppose these data are available in PCCU's information system? What difficulties would you encounter collecting the data?

At this level, students should be able to design a simple test of independence such as a chi-square test of independence. This test requires a contingency table including the two criterions being examined for independence. To examine Mr. Kelly's concern, the first category would include the risk categories (A through D) and the second category would include race classification. Exhibit TN 5 provides a sample contingency table. The instructor should emphasize that while this test might disclose a correlation between race and risk categories it does not control for other factors that might contribute to the correlation. Since Mr. Kelly's concern seems to be with a correlation regardless of possible underlying reasons for the correlation, this test will provide that information.

Would a correlation provide evidence of price discrimination? Probably not. Price discrimination occurs "When a producer charges different prices for different units of the same product for reasons not associated with differences in cost.[1] " Loans bearing different levels of risk have different costs. High-risk loans carry higher default risk and, hence carry a higher cost to the credit union. Table TN-1 specifically shows the differences in cost for the A/B vs. C/D borrowers. However, the three conditions required for price discrimination to be successful are arguably present at PCCU [2]. First, the firm might have enough market power to enable it to set prices. Second, there are classes of consumers with different demand elasticities, and prices are higher for consumers with less elastic demand. Third, PCCU's markets might be separated so that arbitrage cannot occur to bring prices together. Given these conditions, allegations of price discrimination are possible. Therefore, it is most important that PCCU can substantiate the cost differences to justify the rate differences.

5. Do you support risk-based lending at PCCU? Why or why not?

This discussion boils down to a philosophical discussion of the mission of a credit union. The issue of mission is important. Even though a cost analysis supports differential pricing, the mission of the credit union might not. This is a good question to get accounting and other business students to consider the difference between financial evidence and broader organizational mission.

Exhibit TN 2. Average Total Costs of Risked-based Scored Loans

	Total Risk-based Scored Loans	A/B Scored Loans (82% per Mr. Murphy)	C/D Scored Loans (18% per Mr. Murphy)
Total Costs (A)	$ 449,110[3]	$ 368,270	$ 80,840
Collection Costs (B)	$ 95,344[4]	$ 8,234	$ 87,110
Total Operating Expense (C)=(A+B)	$ 544,454	$ 376,504	$ 167,950
Total Value of Scored Loans (D)	$14,260,424[5]	$11,693,548	$ 2,566,876
Operating Expense Ratio (C / D)	3.8%	3.2%	6.5%
Average Costs of Funds	3.8%	3.8%	3.8%
Contribution to Reserves	1.0%	1.0%	1.0%
Average Total Cost	8.6%	8.0%	11.3%

[3] From case Table 6. [4] From case Table 3. [5] From case Table 5.

Exhibit TN 2a: Grid to Compute Average Total Costs of Risked-based Scored Loans

	Total Risk-based Scored Loans	A/B Scored Loans	C/D Scored Loans
Total Costs (from Table 6.)			
Collection Costs (from Table 3.)			
Total Operating Expense			
Total Value of Scored Loans			
Operating Expense Ratio			
Average Costs of Funds			
Contribution to Reserves			
Average Total Cost			

Exhibit TN 1

PCCU Loan Process

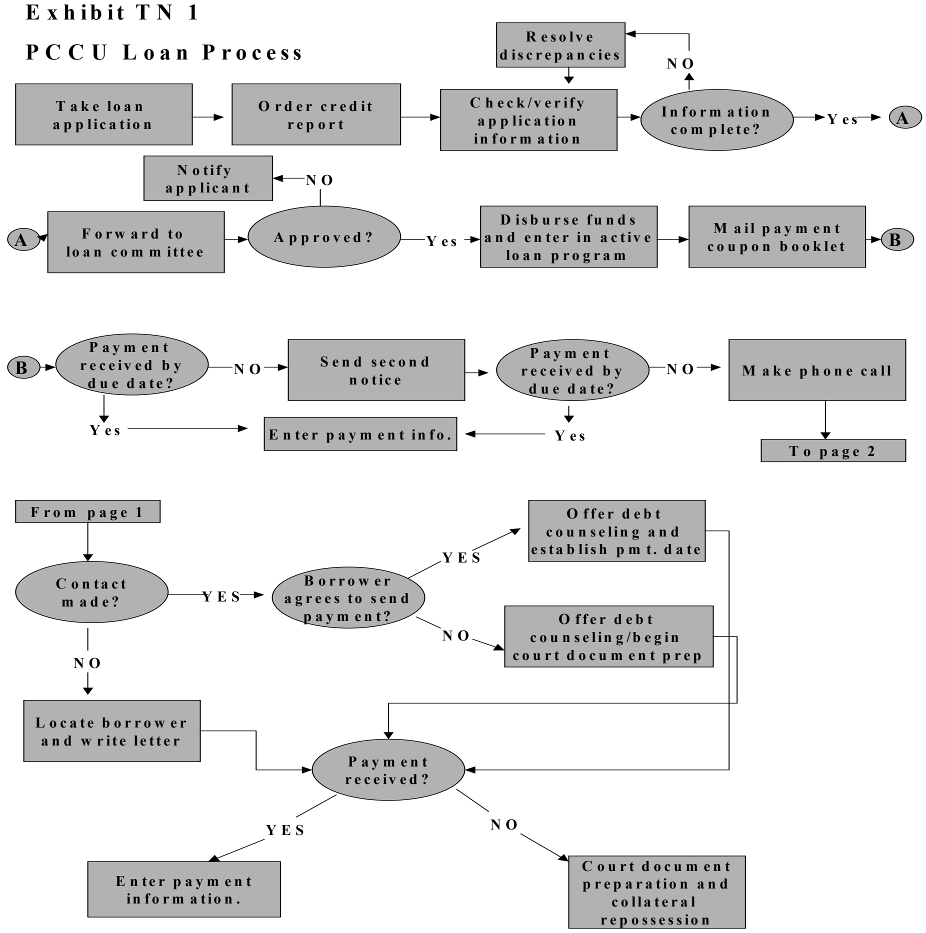

Exhibit TN 3. Percent of delinquent loans by risk category.

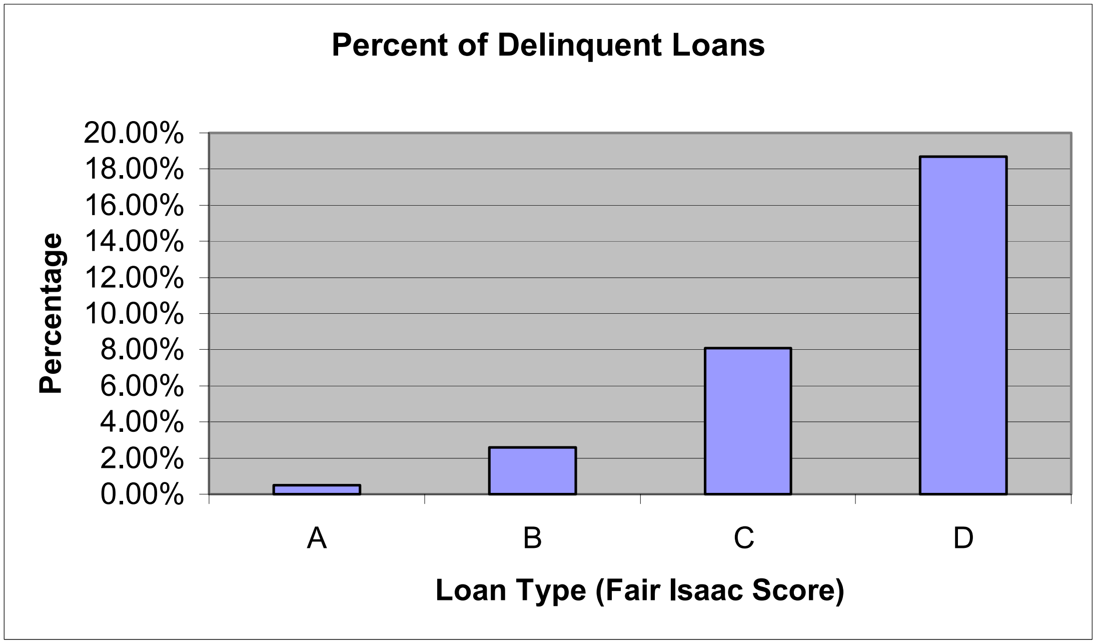

Exhibit TN 4. Pareto diagram

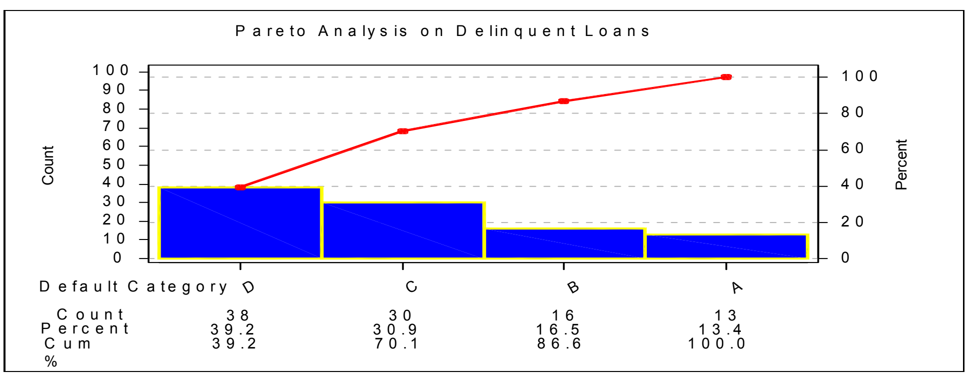

Exhibit TN 5. Contingency table for chi-square test of independence.					
Risk Category	Race				
	Asian	Hispanic	Afro-American	Anglo	Total
A					
B					
C					
D					
Total					

ENDNOTES

1 Lipsey, R. G., P. Courant & C. T.S. Ragan. (1999). *Economics*, Reading, MA: Addison-Wesley Publishing Company, Inc., 242.

2 Peterson, H. C. (1993). *Business and Government*, New York: Harper Collins College Publishers, 186.

I'M MAKING YOU AN OFFER YOU CAN'T REFUSE!

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CASE DESCRIPTION

This case describes a typical situation in a small business franchise environment; a former employee and a current employee of a retail franchise vacuum cleaner store have been asked (strongly persuaded) by the store's owner to become partners in a new store. The problem for the characters in question is whether or not they each (individually or as a team) enter into this venture and how they should then proceed given their decision. Several factors complicate this business startup decision, including: the need to make the decision quickly in order for the new venture to take advantage of Oreck's new store inventory special (discounted inventory) and a low rent store location (which may be leased within a few days), the negative relationship between two of the potential partners, the rather complicated legal and organizational structure of the new organization (including the fact that this is a franchise operation), and the fact that one of the partners will not be contributing any substantial capital towards the new venture. The case has a difficulty level appropriate for sophomore level or above. The case is designed to be taught in one class period (may vary from fifty to eighty minutes depending upon instructional approach employed, see instructor's note) and is expected to require between two to fours 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 the owner of a series of Oreck retail stores, Marc Paulson, offers a former employee (Stephen Hodgetts) and a current employee (Gerald Mahoney) the opportunity to invest in a new store with Mr. Paulson as a silent partner. Stephen Hodgetts is intrigued by the offer but Gerald Mahoney is silent throughout the meeting . Stephen and Gerald go to visit the store location site in question, and on the way back from the trip Gerald makes it clear to Stephen that Marc Paulson is not to be trusted and that he would be a very difficult person to work with. When Stephen and Gerald get back to the store March Paulson hands them projected revenue and cost data that indicates that the store would yield \$4000/month in positive cash flow. The case ends with Mr. Paulson asking for a decision and reminds Stephen and Gerald that they need to act quickly in order to take advantage of Oreck's inventory discounts and to lock in the desired store location.

INSTRUCTORS' NOTES

Overview

To quote Vesper (1990, p. 128) "sometimes the idea for a particular venture comes 'out of the blue' in the form of a proposal by someone else who has seen an opportunity and wants to collaborate in exploiting it." Furthermore "most venture ideas come from the former jobs held by the entrepreneurs." (Ibid, p. 129) These statements aptly describe the situation that our two protagonists find themselves in; a former employee and a current employee of a retail franchise vacuum cleaner store have been asked (strongly persuaded) by the store's owner to become partners in a new store. The problem for the characters in question is whether or not they each (individually or as a team) enter into this venture and how they should then proceed given their decision.

Several factors complicate this business startup decision, including: the need to make the decision quickly in order for the new venture to take advantage of Oreck's new store inventory special (discounted inventory) and a low rent store location (which may be leased within a few days), the negative relationship between two of the potential partners, the rather complicated legal and organizational structure of the new organization (including the fact that this is a franchise operation), and the fact that one of the partners will not be contributing any substantial capital towards the new venture.

In this case, students are asked to analyze the proposed venture and to decide whether the offer "is a good deal" from both protagonists' perspectives. Students must also determine what would be appropriate counteroffers if one or both of the central characters decided to pursue the deal.

Intended Instructional Audience & Placement in Course Instruction

This case was primarily developed for undergraduates taking an Entrepreneurship and/or Small Business Management course, focusing on the areas of business startups and ownership. Secondarily, this case could also be utilized in a retail management course (the locus of the case). The case should be introduced after the students have read the chapters on business start-ups, franchises and legal forms of organization (Chapters 4, 5 and 10 in Hodgetts and Kuratoko, 1998; Chapters 1, 6 and 15 in Hisrich and Peters, 1998; Chapter 2 [Section 2], and 5 in Coulter, 2001). For retail management courses, the case may be employed in conjunction with store-based retailing and organizational structure (Chapters 2, 10 in Levy and Weitz, 2001; Chapters 3, 4 in Berman and Evans, 2001).

Secondly, it is also strongly recommended that students be exposed to material dealing with the ability to negotiate a deal (and/or how to gracefully turn down a deal) and the composition of the founding management team. This material may not appear in traditional entrepreneurship/small business texts, therefore it is suggested that the instructor supplement student readings (see Vesper, 1993 on negotiations; Allen, 1999 on the founding team).

This case may be employed as a sectional summary case, especially in the areas of business startups and business formation, or a comprehensive case (may not be sufficiently complex for graduate students) given the numerous subject areas addressed in the case.

Learning Objectives

The overall purpose of this case is to introduce students to the nuances associated with a surprise offer of becoming a co-owner of a small business startup . Students obtain a "real-world" feel of the situation given the low capital investment (under $20,000 per person) and the abrupt manner in which the offer is presented. This case is of particular value to students since many of them may be presented with similar situations from coworkers and employers after a few years of on-the-job experience. Specific learning objectives are as follows:

1.	For students to determine what information is needed in order to make a cogent decision on whether or not to start a business
2.	For students to develop recommendations for both of the key characters in terms of not only whether they should move forward with the deal but also how to negotiate the deal and/or reject the deal.
3.	For students to recommend what legal form of organization this new venture should employ.

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 the specific methodology employed, that students prior to reading this case be exposed to some material on business startups, legal forms of organization, and negotiations. Furthermore, it is also suggested that a brief overview be given to the advantages and disadvantages of franchise operations (Greene, 2001).

This conceptual framework may be delivered prior to assigning the case by using at least one (1) of the follow methods:

♦	a short lecture and/or discussion session on aforementioned topics.
♦	a reading assignment prior to reading the case on the pros and cons of starting your own business (Vinturella, 1999).
♦	a short student presentation on each topic.
♦	a guest lecturer from a local retail store on how and why he or she started his or her own business.

Case Method

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 as well as the field of management. This case in particular will also require students to draw upon their knowledge of business startups and small business management. 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 & Robinson, 2000)

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.

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 three 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 are the critical junctures of the conversation between the owner, the ex-employee, and the employee?

The instructor may either go through these questions prior to case enactment or wait for each (or both) of the role playing exercises 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 4-5 with students three of the students enacting the key roles in the case and the others acting as observers. 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 Stephen should be instructed to respond to Marc's question. The instructions to the students should note that Stephen seems quite interested in pursuing the offer while Gerry is adamant that he cannot work with Marc as a partner. 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? What was Stephen's and Gerry's response to Marc's offer?
♦	If Stephen and Gerry did agree not go for the deal, what was their response to Marc's offer? Did Marc try to persuade them otherwise? Was he successful?
♦	If Stephen and Gerry took the deal, what was their reasoning behind it? Would you take the deal? Why or why not?
♦	If Stephen and Gerry disagreed in terms of taking the deal, what were the results? Did Stephen decide to try to do the deal without Gerry or did he try to convince Gerry that the deal was a good one?
♦	If Stephen and Gerry disagreed, did Gerry try to talk Stephen out of the deal in front of Marc? How did Gerry handle his rejection of Marc's deal?

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 the offer. 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 business startups and team formation with case specifics and the results of the role-playing exercise.

OVERVIEW AND DISCUSSION CONCERNING RELATED LITERATURE

The following sections are short summaries of some of the literature pertaining to business start-ups (including franchises) and legal forms of organization. More detailed material can be found in the cited references and the discussion section of the teaching note.

Business Start-Ups

The Lycos network has excellent account of business startups and small business entrepreneurship (http://www.lycos.com/business/startbiz.html) and the following description employs a similar approach to the topic.

There a numerous methodologies for starting a business, however, most textbook authors in the field agree that the first step in opening up a new business is deciding whether or not the individuals in a business start-up has what it takes to succeed in their own business. (Greene, 2001) One manner in which to determine if the individual in question has "the right stuff" for an entrepreneurial venture is to compare the traits of the potential small business owner with those characteristics of successful entrepreneurs.

Allen (1999) noted that successful entrepreneurs tend to be moderate risk-takers, possess a high need for achievement, have a strong desire to work independently, possess an internal locus of control (believe that they control their own destiny), and have a high tolerance for ambiguity. She further cited behavioral literature that entrepreneurs commit resources to opportunities, establish procedures for using those resources, interact amongst employees, and coordinate and establish routines. Allen (1999, p. 9) supplies a simple assessment instrument for determining whether an individual has an entrepreneurial orientation and noted that although not sure proof, the instrument provides guidance on the whether the individual possesses entrepreneurial traits and behaviors.

Once the individual has decided that they have an entrepreneurial orientation, the next step would be to learn about the advantages and disadvantages to owning one's own business. Coulter

(2001, p. 23) denoted that the rewards of entrepreneurship include a high degree of independence, using a variety of skills and talents, having the freedom to make one's own decisions, being accountable to oneself, tackling challenges, having the potential for greater financial reward, and obtaining a feeling of achievement. Bangs and Pinson (1999) stated that prospective entrepreneurs need to examine the negative impact that starting a business will have on their personal lives; usually their income suffers, they work far longer hours, tend to become isolated (stresses family relations), and minimize their commitments to their family, friends, community, and personal activities.
Greene (2001) also observed that two thirds of new businesses fail within the first six years (entrepreneurship is a risky venture).

Assuming the individual believes the pros outweigh the cons, the future entrepreneur needs to determine what type of business he or she would be interested in starting. Greene (2001) recommended that potential entrepreneurs assess their aptitudes, and their interests, coupled with their prior work experiences, to determine what they can and want to do. This information should then be employed to look for a match between the potential business's characteristics and the entrepreneur. Hisrich and Peters (1998), on the other hand, take an alternative approach to business selection. They focused on the development of a business idea, a creative venture, and the possible sources of those new ideas (consumers, existing companies, distribution channels, federal government, and research and development). These ideas should lead to the development of a new product and/or service. Vesper (1993) combined these techniques in what he describes as seizing business opportunities; the entrepreneur simultaneously detects opportunity clues while matching his or her findings with their personal capabilities and personal preferences.

Start-up or purchase. An option that many entrepreneurs may want to explore is the purchasing of an existing business or franchise operation. Lambing and Kuehl (2000, p. 101-103) determined that the advantages of buying an existing business include less risk and less time and effort, with the possibility of getting the business at a bargain price. Franchises also have additional advantages including start-up assistance, instant recognition, purchasing power, a basis for assessing the success of the operation, and advertising scope and sophistication. (p. 116-7) Of course, there are disadvantages with buying a business or franchise including: negative external and internal environments, departure of the current owner, franchise restrictions and possible termination, and purchase costs. (p. 103-6, 117-119)

Feasibility study. Regardless of the methodology employed in developing a new business (matching or idea generation) or purchasing an existing business, the entrepreneur needs to investigate the opportunity or proposed business concept and determine if there is sufficient demand for the proposed product or service. Allen (1999, p. 36-7) suggested performing a feasibility study to establish the sufficiency of market size and estimated sales revenue, capital requirements in light of potential sales, and formation of start-up team. Coulter (2001, p. 80) provided an example of a feasibility study with the following components: brief description of the venture, industry and economic background; competitive analysis; accounting, management, marketing, finance, legal and tax considerations. The feasibility study should also highlight the areas of distinctive competence and the competitive advantage of the proposed business model as well as include estimated start-up costs, an operating budget, and a simple break-even analysis. (Bangs and Pinson, 1999)

Business plans. If the entrepreneur determines that the feasibility study demonstrates the possibility of a viable business, then the next step would be the development of a full-blown business plan. Greene (2001) proposed that business plans serve several major purposes:

♦	Provides an explanation of the business concept and delineates the market channel for the product or service. The plan forces the entrepreneur to think about all of the aspects of the business and how each component fits together.
♦	Sets specific goals for the entrepreneur and the business and describes the strategies employed to achieve those goals. The plan helps secure financing for the business by demarcating implementation plans and communicating those plans in an acceptable fashion.
♦	Describes the background and experience of the people involved in the business start-up. The plan serves as a tool for managing the human side of the business, the employees, and allows the entrepreneur the ability to build and support a management team.

Business plans are expansions of the feasibility study (Allen, 1999) and although the actual format of the plan may vary in accordance with the entrepreneur's personality and objectives, the major components of the plan remain the same. Coulter (2001) noted that the internet contains numerous web sites with business plan outlines that can be easily downloaded or worked on directly (i.e. www.bplans.com) or software can be purchased through software retail outlets (i.e. BizPlanner). She recommended the following outline:

1.	Executive Summary (Objectives, Mission, Key Success Factors)
2.	Company Summary (Ownership, History or Start-Up Plan, Location and Facilities)
3.	Products/Services (Description [including competitive p/s], Sales Literature, Sourcing, Technology, Future Products)
4.	Market Analysis (Segmentation, Target Market, Industry Analysis)
5.	Strategy and Implementation (Value Chain, Marketing Strategy, Sales Strategy)
6.	Management Plan (Legal and Organizational Structure, Team, Personal Plans)
7.	Financial Plan (Assumptions, Financial Indicators, Breakeven Analysis, Projected Profit/Loss, Cash Flow, Balance Sheets, Business Ratios, and Long Term Plans.) (p. 317-8)

Capital requirements. Once the business plan is completed, then the entrepreneur needs to raise the capital necessary in order to start-up the business as well as enough capital to continue its operation until he or she obtains a steady cash flow (break-even). Startup costs normally include equipment and supplies, furniture and fixtures, vehicles, remodeling, legal fees, and licensing fees, usually the bare minimum to get a business off the ground. (Greene, 2001)

In order to calculate cash flow needs, Coulter (2001) noted that a cash budget or forecast is required. Step 1 in the process is determining the desired cash balance to keep in reserve based on the expected out-of-pocket bills to be paid on a monthly basis. The second step is identifying the actual beginning cash-on-hand. The entrepreneur then adds to the beginning cash the forecasted cash receipts and then subtracts the forecasted cash disbursements. Lastly, the entrepreneur then reconciles the ending cash with the desired cash balance. If the ending cash balance is lower than the opening cash balance then the entrepreneur needs to add cash to the beginning cash-on-hand in order to break-even at the end of the month. This monthly cash gap is then forecasted over the entire break-even period and usually summarized in a pro forma statement. (Bangs and Pinson, 1999) The capital required to meet the total negative cash flow is added to startup costs to determine the minimum amount of funds that have to be raised by the entrepreneur.

Capital formation. Most small businesses fail from being undercapitalized. Fraser (1999) noted 20 separate sources of funding new ventures, inhabiting the categories of bank loans, nonbank creditors, family and friends, private equity, public equity, corporate support, international finance, and "the right contacts." (p. 136) Allen (1995) recommends several methods for raising capital for a new business venture, they include:

♦	Sell equity in the firm using personal resources (including the resources of family members and friends) and locating private investors (including Small Business Investment Companies).
♦	Incur debt through commercial and community banks, finance companies, SBA guaranteed loans, and through personal resources.
♦	Obtain start-up grant money through government agencies (i.e. The Small Business Innovation Development Act of 1982 requires government agencies with budgets over $100 million dollars to set aside a portion of their budget for technology-based small businesses).

Once start-up funds have been obtained, then the entrepreneur and implement his or her business plan and move the venture forward.

Legal Forms of Organization

One of the most critical decisions in a business startup is determining the legal form of the business organization. Each form has differing set-up costs, tax treatments, liabilities to the owner(s), advantages and disadvantages and therefore the pros and cons of each form should be considered by the entrepreneur. The forms are as follows:

Sole Proprietorship - one owner, profits and losses of the business are taxed at the personal rate of the owner and are filed on his or her personal income tax. Advantages include low startup costs, freedom from most government regulations, direct control by owner, and easy exit from business. Disadvantages include unlimited personal liability, assume all risk, excluded from business tax deductions, may be difficult to raise capital.

General Partnership - Two or more owners, profits/losses taxed at personal rate with flexibility in profit-loss allocation to partners, and personal assets of all partners are at risk. Advantages include ease of formation, pooled resources and talent, somewhat easier financing than sole proprietorship, and some tax benefits. Disadvantages include unlimited personal liability, divided authority and decisions, potential for conflict, and lack of continuity of transfer of ownership.

Limited Liability Partnership (LLP) - Similar to a partnership except only one partner retains unlimited liability (others are limited). An advantage to the LLP is that it is a good way to acquire funds from limited partners. Disadvantages include the cost and complexity is high and the limited partners are excluded from the management of the business.

C Corporation - Unlimited number of owners (no limits to type of stock or voting arrangements). Dividends are taxed twice (corporate and personal) while the corporation handles the taxes from profits and losses. Advantages include limited liability, transferable ownership, continuous existence, and easier access to resources. Disadvantages include expensive to establish, closely regulated, double taxation, extensive record keeping, and charter restrictions.

S Corporation - Up to 75 shareholders (no limits to type of stock or voting arrangements). Profits/losses taxed at personal rate with flexibility in profit-loss allocation to partners. Advantages include easy to set up, enjoy limited liability and tax benefits of partnerships, can have a tax-exempt entity as a shareholder. Disadvantages include must meet certain requirements and may limit future financing options.

Limited Liability Company (LLC) - - Unlimited number of members (no limits to type of stock or voting arrangements). Profits/losses taxed at personal rate with flexibility in profit-loss allocation to partners. Advantages include greater flexibility, not constrained by regulations on C and S corporations, and taxed as a partnership. Disadvantages include the switching cost from one legal form to a LLC can be high and you need legal and financial advice in forming the operating agreement. (Coulter, 2001, 136-7)

Ridley (1999) noted that certain business forms may be appropriate during the start-up, pre-capital phase but become less attractive from a venture capital funds perspective (i.e. S Corporations, partnerships, LLP's, and LLC's). These firms would not be able to obtain preferred stock or convertible debt, their preferred choices of security, from certain legal forms of business.

CASE QUESTIONS AND SUGGESTED RESPONSES

1. Given the time constraints, do Gerry and Stephen have enough information in order to decide whether Marc's business deal is a good one? If not, what more information would you want before making this deal?

In answering this question students may note that Gerry and Stephen only have a few days in which to make a decision in terms of gaining an inexpensive location as well as a discount on inventory. Gerry and Stephen may feel some pressure in making this decision and students may suggest that they do not have the time or the resources in order to develop a full-blown business plan. That being the case, the real question is, what information is critical to Stephen and Gerry's decision-making?

First off, Gerry and Stephen have to decide whether they want to go into their own business and whether they have "the right stuff" (personal traits and capabilities) in which to co-own and operate a business. Neither of them seems to have any experience in running their own business (or working for themselves) and Marc's offer came as a big surprise to both of them.

Assuming that Gerry and Stephen think that they can handle becoming store owners, they also have to consider the impact that ownership will have on their families and/or their quality of life. More specifically, Stephen would now be working seven days per week (unless he could alter his working hours at his regular job) and Gerry would have the sole responsibility of managing the store (undoubtedly requiring extra work hours both before and after the store is opened). A decision of this magnitude should involve Stephen's significant other (perhaps even a family meeting) who may not want Stephen to deal with the added pressure and lack of family time.

There may not enough time to develop a full-blown business plan, however, a quick and dirty feasibility study may be in order. Information that is critical to determining the viability of this new business includes market size (including competitive data), estimated sales revenue, capital requirements in light of potential sales, and formation of the start-up team.

Without market data it is quite difficult to determine the viability of the business, regardless of its specific location. Currently, Stephen and Gerry have no information in terms of both the size and potential of the Newburgh market and have no idea as to the potential competitors in the area. Marc's projected sales revenue information is based upon his other stores' performances and not estimates based upon local socio-demographic data and consumer buying patterns. Capital requirements are also based upon Marc's previous startup, not project sales based upon market data, and therefore should be somewhat discounted.

More importantly, the figures provided by Marc have not been substantiated -- they are not supported by either income statements, balance sheets, or cash flow statements from Marc's other businesses. Given Gerry's comment about not trusting Marc, it would be prudent for Stephen and Gerry to seek documentation supporting Marc's projected cash flow statement.

Students may find support for challenging the veracity of the numbers through the denoted tax rate. Whether the rate be either corporate or personal, a 10% Federal Tax rate only applies to long-term capital gains for individuals in the 15% (lowest) personal tax bracket. Federal Corporate Income Tax rate on taxable income from \$0-\$50,000 is 15% (as well as the lowest personal income tax rate). (Sieg and Johnson, 1999) New York State Income Tax is also excluded from the calculation.

Although the capital requirements are estimated to be quite small (comparatively speaking), there is not information in the case that describe Stephen and Gerry's personal financial situations. Stephen and Gerry therefore would have to determine whether or not they can raise the capital (either through their own assets or through borrowing) and would have to factor in either the cost of capital (loan repayments) or the opportunity cost (the cost they would incur using their own assets) into their financial analyses of the deal.

Some students might argue that Stephen and Gerry need more than just a few days to consider the offer, regardless of the quality of the current information, and therefore should outright refuse the offer. They might also make the case that Stephen and Gerry should use the full cost figures (minus Oreck discount, minus low rent) to determine the viability of the business startup; if the project doesn't breakeven with the full cost figures in two to three years than they should not accept Marc's offer.

2. Develop a list of the pros and cons of the deal from both Stephen and Gerry's individual perspectives. What seems to be the biggest advantage or disadvantage to the deal? Should each of them agree to the deal?

Stephen	
Pros	Cons
a. Likes the business and working with Gerry.	a. Doesn't know Marc Paulson well.
b. Likes the idea of owning a part of a store.	b. Would work seven days per week.
c. May lead to other stores (empire building).	c. Gerry very reluctant to do the deal.
Gerry	
Pros	Cons
a. Seems, at times, enthusiastic about the deal.	a. Gerry doesn't trust Marc and does not want to becomehis partner.
b. Location is questionable.	

Assuming that Stephen can financial swing the investment, the biggest "pro" is that Stephen sees the business as a way to achieve his financial success by emulating Marc's empire-building approach (creating a chain of stores). On the negative side, Stephen is concerned that Gerry is reluctant to do the deal. Stephen seems ready to accept Marc's offer but knows that the decision rests in Gerry's hands since Stephen cannot operate the store on his own. Gerry is also enthusiastic about the deal and seems convinced that although the location is not the best, that the store is in a good enough spot to make a go of it. However, his objections to becoming a partner with Marc seem so strong as to mitigate the possibility of the deal ever going through. Students may recommend that Gerry either overlook his opposition (for the sake of the deal) or go with his gut reaction (kill the deal in a way that does not insult Marc).

Some students may take the case question further and speculate whether Stephen will try to convince Gerry to ignore his resistance to having Marc as a partner or respect Gerry's opinion enough to just walk away from the deal. The case does not present information concerning Stephen and Gerry's relationship (they seem to be long term friends) and how much Stephen will respect Gerry's position. On the one hand, Stephen demonstrated some awareness of Gerry's reluctance about the deal when he noted Gerry's silence throughout Marc's presentation. On the other hand, Stephen tried to overcome Gerry's objections by noting the positive differences of working with Marc as a partner versus having Marc as a boss (as well as the legal protection they would have through half ownership and a management agreement).

3. Assume that Stephen and Jerry want to accept the deal but feel that Marc's lack of capital investment is inequitable for 50% ownership of the business. What approach with Marc would you take to obtain a better deal? Then assume that Stephen and Jerry decided to reject Marc's deal, how might you do so in a diplomatic manner?

In summary, Stephen and Gerry and putting up $ 35,000 to start the business while Marc "is responsible for setting up the corporation, the store, and the books and making sure that we have enough inventory to open." It is not clear exactly what cash outlays Marc would incur for setting up the corporation and the books (usually about $ 500 each) and whether continued legal and accounting services would be paid by him or the newly formed organization. It also seems that the startup expenses (i.e. fixing up the store and buying inventory) are to come out of the funds put up by Stephen and Gerry and therefore Marc's 50% ownership of the new company would seem to be based predominately on "goodwill" (his years of experience in the business plus his franchise agreement with Oreck).
Stephen and Gerry can use several differing tactics in closing this deal.

1. Deals are "guilty" until proven innocent - Stephen and Gerry can request substantiation from Marc in terms of his calculations. Given the time constraints, Marc may opt to offer a better deal than try to disclose real figures (or to hide his real numbers).
2. Become a deal killer - test the interest of the opposite party by walking away from the deal. In this case, Stephen and Gerry should kindly decline the offer and see if Marc comes back with a counter offer. They should, however, then be prepared to lose the deal.
3. A deal must feel good - the lack of trust between the parties might be used by Stephen (leaving Gerry out) as a ploy to have Marc negotiate in order to build trust between the parties. Yegge (1996) however does caution that "when you can't make a friend during negotiation, revisit and question merits in the overall deal." (p. 256)

4. The only thing urgent in life is life itself - Marc may be using the short time frame as a ploy to get Stephen and Gerry to act hastily and inadvisably. They can use the same ploy to their own advantage by testing the urgency of the deal. See item 1, above.
5. Good cop, bad cop - Stephen and Gerry can appear at odds with each other (Gerry for the deal, Stephen against the deal) in order to have Marc "help" Gerry convince Stephen to go in on the deal (usually through concessions).
6. State personal needs early in the game - Stephen and Gerry can be open and honest with Marc and put their concerns on the table, up front. All three people involved in the deal must therefore reach a complete understanding if the deal is to work.. (Yegge, 1996)

Students may suggest several other tactics as well -- the real question is whether Stephen and Gerry approach the deal in a "win-win" or "win-lose" manner. Their approach is not only a tactical decision (confrontation versus compromise, smoothing, forcing, and avoidance) but an ethical one as well (honesty versus game playing). (Collison, 1988) Given Gerry's lack of trust in Marc, many students might recommend that Stephen and Gerry take a win-lose approach to negotiating the deal, that is, use ploys and game playing in order to get the best deal they possibly can.

If Stephen and Gerry are going to reject the deal, it is fairly obvious that telling Marc the exact truth as to why they are rejecting the deal (Gerry's lack of trust in Marc) may have very negative results for Gerry's employment situation. Again, Stephen and Gerry can use varying excuses as to why they cannot accept the deal (lack of funds, not ready to go into business on their own, Stephen needs to discuss it with his family, etc….), however, Stephen should be the spokesperson in order to shelter Gerry. Some students may suggest that Gerry appear supportive of the deal but that Stephen reject the deal outright. (Again, the intention is to protect Gerry's job.)

There is a risk associated with "excuses." Marc may offer counter suggestions that may offset Stephen and Gerry's justifications (in fact, one would be surprised if Marc hadn't already prepared responses to most of them). For instance, if Stephen and Gerry claimed that they did not have access to capital, Marc could offer to loan them the money at little or no interest in order to make the deal work. If Gerry acted like he really wanted the deal but Stephen backed out, Marc could offer to find another investor or even offer to invest his own funds.

Again, beyond the issue of tactics is the issue of ethics. By being honest with Marc about why Gerry specifically doesn't want to go into business with him, Gerry may risk his job, however, he is also avoiding the game playing associated with alternative explanations. By being open with Marc, it is possible that Gerry could in fact help Marc to realize how others perceive his behavior -- this may lead Marc to change his behavior towards his current partners (or it just might get Marc angry).

4. Assuming that Stephen and Marc do opt to go into business with Marc, what legal form of organization would you recommend?

The issues related to the legal form of organization in this case include personal liability (Stephen's, Gerry's, Marc's), tax implications, and entity ownership. In terms of personal liability, it is evident that, given Gerry's lack of trust of Marc, Gerry would require a legal form of organization that would limit his liability to solely his investment in the business. Secondly, it would also make sense for Marc to limit his liability in this operation given the fact that he has numerous other business assets that he would not want to risk for this small venture. It would also seem that none of the participants would want their personal assets at risk as well (and certainly Marc sounds like he has numerous assets).

Secondly, given Marc's financial estimates, the business is expected to have a positive cash flow of $4400 per month. From a tax perspective, it would seem that the question is whether Gerry and Stephen would wish to claim an additional income of $12,100 per year (25% of $4000/month), and Marc $ 24,200 per year, or whether they would prefer to have the corporation pay a 25% federal tax rate on $52,800 (although Marc cites 10%) and then have Marc, Stephen, and Gerry pay taxes on the declared dividends (assuming that all profits would be returned as dividends after 3-6 months of operation). Given the case scenario (that profits would be pulled out of the company and distributed to the owners), Marc, Stephen, and Gerry might want to avoid double taxation and adopt a legal form of organization that passes profits and losses directly to the owners.

Last, Marc Paulson mentioned that he would want the Paulson Group, his corporation, to own 50% of the new organization (rather than his personal ownership). This limits the legal form that the organization can employ.

Given the above analyses, it would seem that a limited liability corporation would make the meet the needs of the prospective owners. Owners' liability is limited to their investment in the corporation, profits and losses are passed onto the individual owners, and a corporation may own stock in the LLC.

CASE EPILOGUE

Stephen and Gerry decided that they really needed time to think about the deal and asked Marc if they could have a few weeks in which to do some research and discuss the matter. Marc felt that two weeks was "way too late" and that he needed to move on the deal as soon as possible. He decided to offer the same deal to one of his other existing partners and to one of his sales staff. They both opted to take Marc's offer. Approximately six months later the sales person was bought out (due to his incompetency in running the store) and two months after that Marc opted to sell his ownership of the store to his old partner.

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KNIVES FOR TRADE: BEAR CUTLERY

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CASE DESCRIPTION

The primary subject matter of this case is international business. Secondary issues include environmental scanning, market analysis, and an analysis of economic, cultural, financial, and political factors involved in an international decision. The difficulty level is three, appropriate for junior level courses. The case is designed for a one and one-half hour class session. Internet access will help students collect information for their responses. The case lends itself to being introduced at the first of an international business class as it encourages students to begin to think internationally.

CASE SYNOPSIS

This case centers upon the decision to engage in international business. The company must decide whether to pursue foreign markets. If the decision is to become international, then the company must decide whether to export or manufacture in another country. The vice president of marketing has suggested that Bear's future success lies in exporting their products. However, the company is small and located in a small southern town. The owners and members of the board of directors are reluctant to enter such an uncertain environment. None of them have any international experience and, quite frankly, they do not know where to start.

INSTRUCTOR'S NOTES

Case Objectives

The principal subject matter of this case is to focus students on the types of decisions that may be faced by companies, both large and small, concerning increasing sales and profits. Additionally, an objective is for a student to conduct a brief SWOT analysis for an international business decision; subsequently, the student would suggest which option they feel is appropriate. Finally, the student is nudged toward Canada and Mexico as potential sales locations.

Additional Internet Sites Providing Case Related Information

Table 1: Knife Industry Sites

Site Name	Web Address	Description of Content
Bear MCG Knives	www.bladez.com	Knife Product List with Descriptions and prices
The Knife Professional	www.knifepro.com	Products divided into categories then listed with descriptions & prices Offers more than cutlery; includes tools, binoculars, hunting gear, etc.
Big Sky Collector Knives	www.bigskycollectorknives.com	This site offers specialty knives for collectors.
Victorinox Home Page	http://argon.airtime.co.uk	Homepage for a Swiss Cutlery company. Products categorized, described and priced.
Chamberlain's Knives Home Page Knives of All Kinds	www.s-chamberlain.com	Online catalogue for several brands of knives. Product descriptions and prices listed.
Knives USA.com	www.knivesusa.com	Web site offers varieties and brands of knives.

Table 2: Foreign Direct Investment Sites

Site Name	Web Address	Description of Content
OECD Reviews on Foreign Direct Investment	www1.oecd.org	Site provides information and investment reviews categorized by country and type of investment information.
Foreign Direct Investment	www.library.yale.edu	Database access through Yale University Library for Foreign Direct Investment review information.
Seattle University	www.seattleu.edu	Comprehensive list of sites dedicated to all aspects of globalization.
International Chamber of Commerce	www.serraintl.com	A pool of Chambers of Commerce offering information about their respective country or region.
US State Department	www.state.gov	Contains "Country Reports" to acquaint American businesses with other countries.
Electronic Embassy	www.embassy.org	Links to all foreign embassies located in Washington D.C.
BYU Educational Site	http://msmbyu.edu	Extensive directory of country specific sites.
Quadral Group of Chicago	www.quadralgroup.com	Consulting company helps firms "go global".

Table 3: Exporting Assistance Sites		
Site Name	Web Address	Description of Content
International TradeInformation	http://infoserv2.ita.doc.gov	Web site of the International Trade Administration of the US Department of CommerceOffers information on tariffs and taxes.
Draft Design Export	www.export.gov	Web site offering International trade assistance.
Bureau of Export Administration	www.bxa.doc.gov	Site offering Links to various sources of information and various government programs and/or departments. Also offers news that might affect exporting.
Ex-Im Bank Small Business	www.exim.gov	Web site offers financing for Small Business Exporters tomake available to theircustomers.

Table 4: International Shipping Information		
Site Name	Web Address	Description of Content
Shipping Solutions	www.shipsolutions.com	Export shipping document Assistance.
American Baggage Inc.	http://discount-shipping.net	Shipping company web site describes services and rates.

QUESTIONS AND SUGGESTED ANSWERS

Possible answers are included with the following questions. Answers can change due to current issues in the world. Our students follow the foreign exchange market and have to analyze the impact of foreign exchange movements. A positive note about this case is that it can be geared to almost any chapter in international business.

1. Why should Bear think global?

- Increase profits and compete with global companies.
- US market is saturated.
- NAFTA and the reduction of trade barriers between US, Mexico, and Canada could be helpful to exporting and/or manufacturing.
- The product offered is unique because of its technology, design, and/or cost.

- They have a lean operation that saves money and speeds decision making.
- They may want to be closer to their suppliers--easier access to raw materials such as Damascus steel and Indian stag horn.
- The WTO attempt to reduce trade barriers could make their product attractive elsewhere.
- The reputation of US military would indicate that they use high quality goods.
- Markets overseas are growing faster than US market.
- The volatility of foreign situations (escalating to war) increases need of military associated items.
- The military is downsizing so their current market will be smaller. They should develop a strategy before they lose a major customer.

Other answers could reflect world current situation, and materials in the first chapters of their textbook. The exchange rate for the US dollar against other currencies could make the decision more or less attractive, depending on the strength or weakness of the US dollar.

2. What is happening right now at home and abroad that could affect Bear's decision positively and how?

- The dollar is stronger against many currencies that would enable Bear to consider foreign direction investment in Mexico where the cost for skilled workers is low. Also, it is possible to manufacture at other locations known for low cost workers.
- There are more preferential trading arrangements (small groups of nations establish free trade among themselves) that could be helpful to Bear.
- Foreign markets are growing at a faster rate than the home market.
- The ability to communicate rapidly and less expensively with customers and subordinates could help us better control foreign operations.
- In a foreign market, we may be able to obtain a better price than at home because there may be less competition.
- Going abroad often lowers the cost of goods sold.
- The knives could be considered low-volume, luxury goods which would enable it being exported to many different markets without altering the product.
- We could develop a Web site and advertise our products via the Internet. That way, we may find new customers and possibly a distributor in other locations.
- Trade fairs are held in Atlanta, GA and they could market their product to the world with little risk.
- Government agencies may help finance the operation to encourage global exporting.
- Also some states offer tax and export incentives for small business international ventures.
- GDP and GNP/capita are increasing in many countries so more people could buy their products.

- There are experts in the area, including the Alabama Development Office that would aid Bear MCG in going global. They would assist Bear in exporting as well as making FDI decisions on where to invest.
- Cost of transportation and distribution has been reported by the Wall Street Journal to be lower presently which would give an advantage to Bear MCG in exporting their knives.
- Low interest rates could make more money available for expansion.
- The US military uses their items and that could be a positive marketing tool.
- With the dollar increasing in value, there is a greater possibility of foreign production. As the dollar value increases vs. the Mexican peso, bond managers may invest in Mexico with FDI. This would be an opportunity to utilize low cost labor. Mexican labor is known to be skilled and easily trained.
- We could advertise in a trade journal and take small individual orders.
- We could open a sales office in another country.

3. What is happening right now at home and abroad that could affect Bear's decision negatively and how?

- Decline of the real in Brazil as well as much uncertainty in all of Latin America. Presently, Brazil is the US's 11 largest trade partner and approximately 25% of US exports are to Latin America. This could be a good market for Bear but presently it is a vulnerable one.
- Decline of peso relative to the US dollar could promote cheap imitation Mexican imports.
- Situation in Brazil and other Latin American countries could cause a recession. Also these countries may not import new products under the current crisis. The volatility in the currency in this region may cause a company not to invest there presently. Product identification is not as widespread as better known brands, such as Hinkels or Swiss Army knives.
- The American dollar is becoming stronger relative to many currencies that could hurt sales by making knives more expensive.
- Local firms in other countries may try to copy the knife and undercut sales.
- May not be legal to own knife in some countries.
- Diminishing image of hunting in national market
- Bear is privately owned and small; that may cause a problem with raising capital.
- They would have no stock options or other options that larger companies can offer.
- Foreign customers have less money to spend on non-essential items.

4. If you decide that Bear should become an international company, suggest whether you would export or engage in foreign manufacturing. Comment on advantages and disadvantages of your choice.

An intelligent and conservative first choice would be to export to locations that have relationships with the US. These countries would have fewer barriers to trade with US countries and local companies would have some experience dealing with US companies. Make trade relationships first, prior to foreign direct investment or manufacturing on location. If they decide to manufacture in another location, they will have to address their mission statement of ‘selling only American-made knives.'

Focusing on major trading partners of the US provides an idea of where the trading activity is. The business climate for importing to these countries would be relatively favorable. Export and import regulations would not be insurmountable. Probably there are no strong cultural objections to buying American products. Also, satisfactory transportation facilities have been established by others. Import channel members are available. There is foreign exchange available to pay for the exports. Some major trading partners of the US are Canada, Japan, Germany, Mexico, United Kingdom, Netherlands, South Korea, Singapore, Taiwan, France, and Brazil.

Checking The Department of Commerce's Office on Trade and Economic Analysis on the Internet gives access to trade statistics as well as what kinds of products these countries import from the US.

5. If a group decides to export, then they could be asked what form it will take, i.e. would it be indirect or direct exporting. If the choice is foreign manufacturing, then students could be asked what form. Some choices include: wholly owned subsidiary, joint venture, licensing agreement, franchising, and contract manufacturing.

What characteristics would you want in the person to represent Bear if they export the product? What selection procedure would you choose for an exporting director? What training would you suggest for this person? How would you handle compensation? What organizational support would be necessary for a family person? What support would you offer in benefits, housing, and travel? Finally, how would you handle gender when choosing an expatriate?

A person chosen to be marketing director will need to have high technical expertise, understanding all facets of the manufacturing and distribution of Bear's products. Compensation will probably include all expenses as well as bonuses to represent the company for the short period of time. This person will need to have excellent interpersonal skills as he/she will be forging relationships with partners or customers in other countries. He/she will need to be adaptable and flexible.

A person chosen to be an expatriate needs to be willing to accept the assignment, have technical competence, be adaptable and flexible, and understand the culture and language of the area. The expatriate needs to be culturally adaptable and sensitive. Training should be in the country's culture and language as well as in practical matters such as currency, time zones, hours of business, and transportation. The family should be trained as they interact even more closely with the new people and location. Career development and repatriation need to be discussed so that the expatriate does not feel "out of sight and out of mind." The company needs to assist in housing, schooling, and transportation needs. Compensation needs to include salary, relocation bonuses, trips home, schooling for children, and any differentials, making certain that the employee does not suffer financially.

The Civil Rights Act of 1991 extended coverage of equal employment laws to U.S. citizens working internationally for companies whose headquarters were in the U.S. The act states that when foreign country's laws are in conflict with U.S. EEO laws, the foreign laws will apply.

6. How does the US exports and imports per Capita compare to other countries? How do the exports help a country?

The US has gained in prominence as a market for the world but has lost some of its importance as a supplier to the world. Many new participants have entered the international market. The US exports per Capita $3,878 and imports per Capita $5,217. In comparison, Canada exports per Capita $9, 215 and imports $8,013 while Mexico exports per Capita 1,480 and imports $1,619. (www.wto.org; CIA The World Factbook, 2002)

A country exporting helps reduce the trade deficits for a country. In 2000, the US merchandise trade deficit rose to $448 billion which is unsupportable in the long run. Exporting is good for the international trade picture and a factor in increasing employment opportunities. It has been estimated that $1 billion of exports supports the creation of approximately 15,500 jobs.

Table 5: Exports and Imports per Capita for Selected Countries (US$)

Country	Exports per Capita	Imports per Capita
Canada	9.215	8.013
China	173	156
France	6,455	5.953
Germany	7,498	7,371
India	50	61
Japan	3,881	3,076
Mexico	1,480	1,619
Netherlands	16,020	14,793
United Kingdom	6,226	6,750
United States	3,878	5,217

7. What has contributed to the growth of exporting by US companies in recent years?

The weaker dollar has made US-manufactured goods cheaper in terms of the currencies of other countries. More rapid economic growth in Europe and a substantial increase in agricultural exports have also helped. The demand factors that influence both imports and exports are income, the economic growth rate of the buyer, and price (the price of the product in the eyes of the consumer after passing through an exchange rate).

US merchandise exports depend on the incomes of US residents and of the buyers of US products in all other countries. When these economies are growing, the demand for US products will also rise.

8. After examining the HS codes for knives, what conclusions can you make about U.S. exports of knives? Do the codes suggest any clear favorites for passing the initial screening of potential markets?

From the International Trade Administration web site, the export figures for 2001 show that knife exports from the United States are substantial. The figures are divided into two categories (fix blade and folding knives). The numbers for Canada are hard to ignore. If Canada is identified as a potential market worth pursuing, information on the Canadian economy, trade issues, and culture and be found at Statistics Canada (http://www.statcan.ca/english/Pgdb), and at Canada's Official Web Site (http://www.canada.gc.ca/cdns/indiv_e.html).

Table 6: Fix Bladed Knives Code: HS821192		
Total value U.S. exports for Code in 2001		$9,758,000
Top Five Countries	% of Market	Dollar Figure
Canada	55%	$5,416,000
Mexico	10.6%	$1,038,000
Germany	5.7%	$ 556,000
Japan	5%	$ 490,000
Hong Kong	4%	$ 387,000

Table 7: Folding Knives Code: HS821193		
Total Value US exports for Code in 2001		$9,683,000
Top Five countries	% of Market	Dollar Figure
Canada	40%	$4,863,000
Netherlands	6%	$626,000
Mexico	6%	$619,000
Germany	6%	$564,000
France	3%	$330,000

9. What is your opinion of Canada as an exporting option?

Canada closely resembles the US in its market-oriented, production pattern, and high living standards. Canada's population has a relatively high GDP/Capita of an estimated $25,000. Canada's geographical proximity, congruent time zones, and a common language makes doing business in Canada a good choice. The federal government is strongly involved in the economy and is committed to keeping the economy in Canada strong. Canada is the world's seventh largest market economy. The inflation rate is 2.6% and the GDP real growth rate is 4.3%. There is $1.2 billion of trade crossing the US-Canadian border daily. It would be advantageous to export to Canada because of the tariff free benefits that US companies would receive. Canada has a very reliable transportation system. The market for the knives would be strong due to many people hunt for food and entertainment. The knives could be used as a tool in taking or cleaning their game. Also, the segment that most likely would be involved in hunting, 15-64 years old, is 68.28% of the population. www.state.gov, www.odci.gov, www.cia.gov, www.statcan.com, www.trdeport.org, .

10. What is your opinion of Mexico as an exporting option?

Mexico is a country of 102 million people, with a 9% inflation rate, the GDP/Capita is $9,100, the GDP real growth rate is 7.1%, and an average wage of $4.21 a day. It shares a major border with the US and they are both NAFTA members. The US exports 74% of all imported materials into Mexico. Twenty-four percent of the workforce is in agriculture and would have a use for knives. Sixty-four percent of the males are between 15 and 64. Mexico's total highways are only 323,977 km, of which only 96,221 km is paved. This might prove a challenge in distribution. Finally, advertising the product would be easy due to the 865 AM radio stations, 500 FM radio stations, 31 million radios distributed among the people, 236 television stations, and 25.6 million televisions.
www.state.gov, www.customs.ustreas.gov, www.usatrade.gov, www.emgmkts.com/research/country/latamerica/mexico.htm,

DISCUSSIONS AND ANALYSES

This case is easy for the students and for the instructor as well. Current events both at home and abroad have an impact on the decision that students will make. If an instructor prefers to add depth to the case, additional questions could be used. For example, students could determine locations for export and/or manufacture of the knives. Some areas to investigate would be: Import/Export Restrictions, Wages, Availability of Skilled Labor, Political Stability, Transportation Systems, Government Regulations, and Cultural and Linguistic Factors.

BEACH FOODS, INC.

Jitendra K. Sharma, University of Lucknow
P. Michael McLain, Hampton University
Robert Stretcher, Sam Houston State University

CASE DESCRIPTION

The case is designed for undergraduate and graduate courses in business. Both qualitative and quantitative tools can be used to assess business decision-making. Specific courses for which this case is intended include Business Policy, Financial Management and Accounting for Decision Making. The topics to be covered are Ratio Analysis, Credit Analysis, Working Capital Management, Risk Assessment and Bankruptcy Prediction.

CASE SYNOPSIS

This case is a decision case, which requires the students to analyze the financial statements of a company. The analysis is based upon whether to extend trade credit to a company with marginal financial statements. The case reviews some financial ratios developed by Altman and Beaver to make the determination to extend trade credit.

An analysis is discussed in the case concerning the Altman Z-score for non-public companies. While the most popular Altman is discussed in the case, the case examines how to adjust the model in the event a determination for trade credit is required for a non-public company.

INSTRUCTORS' NOTES

Case Overview

Mike is confronted with a decision situation whether to establish or not to establish trade credit relationship with Beach Foods, which has a record of not paying its bills in time. He has to reconcile the functional imperatives of the sales department for increasing sales along with the impact of the credit decision on his company and how a particular parameter can be used for his individual performance evaluation.

Teaching Objectives

- ♦ To develop an understanding of issues involved in a credit decision
- ♦ To expose the students to application of financial ratios and bankruptcy prediction models for making a credit decision.
- ♦ To analyze a credit decision with its financial and behavioral implications.
- ♦ To identify key decision areas where actions are required by the firm approaching for credit in order to improve its creditworthiness.

Teaching Plan

The case is designed for undergraduate and graduate courses in business. Both qualitative and quantitative tools can be used to assess business decision-making. Specific courses for which this case is intended include Business Policy, Financial Management and Accounting for Decision Making. The topics to be covered are Ratio Analysis, Credit Analysis, Working Capital Management, Risk Assessment and Bankruptcy Prediction.

DISCUSSION QUESTIONS AND SUGGESTED ANSWERS

(a) What steps are required to evaluate and decide on a trade credit request?

The following three steps are required to evaluate credit applicant:

a. Gathering relevant information about the party.
b. Analyzing the information to determine credit worthiness of the party
c. Deciding whether or not to extend credit and if so determining the amount of the line of credit

The information required for this evaluation can be obtained through financial statements. Since extra costs are involved in an audit, unaudited financial statements which have been analyzed by an independent qualified outsider without any evaluation of internal controls and without performing specific tests but substantiated through management inquiries suffices for the purpose of making an informed judgment. Apart from this information obtained from credit reporting organizations, bankers, and other trade creditors of the party can be very useful.

To make an overall assessment of the credit worthiness of the party traditional guidelines of five " Cs of credit " can be used as an analytical framework. The suppliers of credit among other things consider the following:

(i) Earnings record over a period of time
(ii) Liquidity position of the firm
(iii) Record of payment.

Financial statement information is required to calculate liquidity, solvency, activity and profitability ratios and understand cash flow position of the company. Use of several models in financial literature can be made to arrive at in making assessment of credit worthiness. Theoretically there are three possible ways of doing this:

(a) The income or cash flow method, which requires knowledge of amount of cash becoming available with the customer indicating his ability to pay.

(b) The capital structure method under which value of the customer's uncharged assets in the customer's latest balance sheet is established and the credit limit will be a percentage of this value.

(c) The amount of credit granted could be based on the value of business, which the customer expects to place with the supplier each period and company's laid down policy to give a credit limit.

The guidelines and techniques can assist in analysis of credit worthiness but sound credit decision depends on the decision maker's judgment in evaluating the available information.

(b) Apply the different models to arrive at your decision to give or not to grant credit to Beach Foods.

The Beaver Univariate Model - Cash flow/Total debt of 0.108 suggests a very low net cash flow position in comparison to debt. Analysis of cash flow indicates that operating activities contributed $272,089 (2.6% of net sales) to the cash flow while there was a net outflow of $165,089 in investing activities and an outflow of in $53,049 in financing activities due to repayment of debt with resulting net cash flow from all three activities being $53,601(0.5% of net sales). If we look at the composition of income in the cash flow it is apparent that rebates and other income comprise major portion of income in the year 1999. Other parameters need to be examined to comment upon if there are any operational improvements in performance as well as company's ability to service its short-term and long- term debt.

Most statistically significant results in predicting distress have been produced by multivariate models. These models incorporate combinations of ratios, which are analyzed together. The result of 5 variable model gives a Z score of 6.589 and 6.585 for the years 1999 and 1998 respectively suggesting the firm to be a going concern. See Table 1a.

Table 1a :

Ratio	Coefficient	Year 1999		Year 1998	
		Ratio	Score	Ratio	Score
Working Capital/Total Assets	0.717	0.0497	0.0356	0.1132	0.0812
Retained Earnings/Total Assets	0.847	0.2372	0.2009	0.2452	0.2077
EBIT/Total Assets	3.100	0.0358	0.1111	0.0040	0.0123
Net worth (Book Value)/Total Liabilities	0.420	0.2966	0.1246	0.3103	0.1303
Sales/Total Assets	0.998	6.1290	6.1167	6.1661	6.1538
Total Score			6.5889		6.5853

Suggested classification - Bankrupt firm if Z<1.23, Possible failure if Z Score 1.23-2.90 and Going concern if Z Score >2.90

However, the Sales /Total assets ratio is believed to vary significantly by industry. Merchandise and service businesses show a high value for this ratio as compared to manufacturing businesses. This higher turnover consequently tends to give higher Z scores. Z scores arrived thus are likely to under predict bankruptcy.

To take care of this anomaly, Altman's 4 variable model can be applied which removes Sales / Total assets ratio from consideration and uses revised coefficients for rest of the ratios. The Z scores of 1.65 and 1.89 in the years 1999 and 1998 respectively in Table 1.b indicate possible failure. Mike can safely use this prediction for denying the credit facilities to Beach Foods.

Table 1b

Ratio	Coefficient	Year 1999		Year 1998	
		Ratio	Score	Ratio	Score
Working Capital/Total Assets	6.560	0.0497	0.3262	0.1132	0.7427
Retained Earnings/Total Assets	3.260	0.2372	0.7733	0.2452	0.7995
EBIT/Total Assets	6.720	0.0358	0.2408	0.0040	0.0266
Net worth (Book Value)/Total Liabilities	1.050	0.2966	0.3115	0.3103	0.3258
Total Score			1.6517		1.8946

Suggested classification -Bankrupt firm if Z Score <1.1, Possible failure if Z Score 1.1- 2.6 and going concern if Z Score >2.60

In order to gain further insights Zavgren model, which uses Logit analysis, can be applied to not only to predict probability of failure in this case but also highlight ratios needing attention. As computed in table 1.c the Logit Criterion Index (LCI) works out be -.4497 giving the probability of bankruptcy as 39%. This figure gives us probability of occurrence rather than clear cut identification of survivor /failure firm and so under the circumstances Mike would be better off in rejecting the request for credit relationship with Beach Foods.

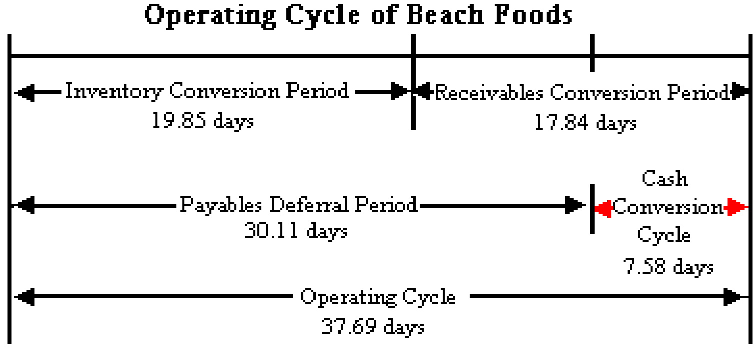
Table 1c

Zavgren Model	Coefficient	Ratio	Score
Constant			-0.2388
Average Receivables/Net Sales	0.108	0.0448	0.0048
Average Receivables/Average Inventories	1.583	1.0922	1.7290
(Cash+Marketable Securities)/Total Assets	10.78	0.0565	0.6090
(Cash+Marketable Securities)/Current Liabilities	-3.074	0.6407	-1.9694
(Income before discontinued operations and extraordinary items)/Total equities-short-term liabilities	-0.486	0.0881	-0.0428
Long-term Debt/(Total Equities-Short-term Debt)	4.350	0.0271	1.1765
Net Sales/(Fixed assets+Net working Capital)	-0.110	15.6180	-1.7180
Logit Criterion Index (LCI) y =			-0.4497
Probability of Bankruptcy = $1/(1+e^{-y})$			0.3894321

3. What other financial tools can Mike use to defend his case of rejecting the credit request?

In the light of the fact that Beach Foods is not enjoying good credit history and paying its bills in forty days in contrast to normal credit terms of 2/10 net 30, it would be worthwhile to understand the operating cycle of Beach foods in the context of its working capital position. The inventory conversion period (average inventory)/(cost of sales/365) and receivables conversion period (average account receivable/(annual credit Sales/365) being 19.85 days and 17.84 days respectively in the year 1999 give the Operating cycle period of 37.69 days. Considering the payables deferral period ((Accounts payables + Salaries payables+ taxes payable)/ (cost of sales+ selling and Administrative expenses)/365)) of 30.11 days in 1999(previous year 26.96), it is apparent that company's deferral period has increased. The cash conversion cycle (Operating cycle Period- payables deferral period) of 7.58 days means that company does require additional non-spontaneous working capital financing to carry out its activities.

Operating Cycle of Beach Foods



The company must shorten its operating cycle period to reduce its working capital requirements or keep on increasing its accounts deferral period. This is what exactly Beach Foods is doing. It is prolonging its accounts deferral period without any injectionof fresh working capital. By stretching its accounts payables Beach Foods is incurring two types of costs. First, the explicit cost of discounts foregone which considering the normal credit terms in the industry of 2/10 net 30 is as high as 37.2% and second the implicit cost of permitting its trade credit rating to deteriorate and be viewed as risky to sell to. The suppliers to Beach Foods can begin to impose strict terms of sale including Cash- on- Delivery or Cash-before-delivery.

Apart from operating cycle concept liquidity, solvency and profitability ratios can be used to comment upon the performance and financial position of the company. The various pertinent ratios appear in Table II.

Table II		
Financial Ratios	1999	1998
Gross Margin %	17.709	18.121
Operating Expense %	17.290	18.107
Operating Income %	0.585	0.064
Net Income %	0.217	-0.194
Return on Assets	1.332	-1.197
Return on Equity	4.491	-3.858
Current Ratio	1.084	1.212
Quick Ratio	0.641	0.626
Debt Ratio	0.703	0.690
Debt- Equity Ratio	2.371	2.222
Times Interest Earned Ratio	2.048	0.193
Inventory Turnover	18.384	-
Average Sales Per Day	$28,263	$25,957
Average Collection Period	19	18
Fixed Asset Turnover	7.097	7.331
Total Asset Turnover	6.129	6.166
Return on Investment %	4.49	-3.86
Working Capital in $	83,686	173,954
Sales Growth %	8.88	-

In spite of marginal decrease in gross margin, the operating income percentage and net income percentage show an improvement. Return of Equity and Return on Assets also show marginal improvement during the year 1999 but Net Profit Margin is alarmingly still low for the company and does not indicate substantial profit earning potential in the long run unless drastic turnaround measures are undertaken .The current ratio in 1999 is worse than in 1998 due to increased amount of current liabilities by way of Accounts Payables. The quick ratio being less than 1 in both the years speak of poor liquidity position of the company to meet its short-term obligations in times of emergency.

As far is solvency is concerned, the debt ratio of 70% indicates use of heavy debt in total asset financing. Considering the low rate of return this signifies negative impact of leverage.

Higher inventory turnover could also suggest insufficient amount of inventory which can result in stock out position. Average sales per day has increased but average collection period has also increased simultaneously from 18 to 19 days suggesting laxity in collecting account receivables or more relaxed credit terms for the customers. Turnover ratios in 1999 indicate inefficiency in asset management. Working capital has decreased. With practically half the working capital in 1999, the company is overtrading its working capital and it is doubtful if it can maintain the current sales growth rate without fresh investment by owners to increase its working capital.

4. What actions should Beach foods take in order to improve its credit worthiness?

Taking clues from various ratios and coefficients constituting the Logit criterion index (LCI) in Table 1.c, it is apparent that actions can be contemplated by Beach Foods with a view to reduce the probability of bankruptcy. Since positive coefficients tend to increase probability of failure and negative coefficients tend to reduce probability of failure, actions should be aimed at reducing positive coefficients or increase negative coefficients.

a. The effect of positive coefficients to raise the chances of bankruptcy can be counteracted through the following:

 (i) Reduction in size of receivables.
 (ii) Increasing investment in inventory
 (iii) Increase in equity capital and retained earnings through injection of fresh equity and retention of profits through improvements in margins.
 (iv) Decrease in Long- term debt through retirement made possible by cash investment by owners.

b. The effect of negative coefficient to decrease chances of bankruptcy can be achieved by:

 (i) Increasing sales. This will require necessary investment in items of current assets particularly inventory, cash and marketable securities.
 (ii) Reduction in current liabilities by reducing its account payable deferral period.

Whether Beach Foods is contemplating steps in this direction can be judged by seeking necessary information from the management, their bankers and suppliers.

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Beach Foods, Inc.
Income Statement
March 31, 1999

	1999	1998
Income		
Net Sales	$10,315,881	$9,474,409
Cost of Goods Sold		
Beginning Inventory	480,950	466,418
Purchases	8,169,459	7,596,208
Other Expenses	281,204	175,863
Ending Inventory	442,589	480,950
Cost of Goods Sold	8,489,024	7,757,539
Gross Margin	1,826,857	1,716,870
Operating Expenses	1,783,582	1,715,538
Gain on disposal	4,700	1,500
Rebates, other income	12,342	3,243
Interest Expense	29,453	31,558
Income from operations	30,864	-25,483
Income tax expense	8,440	-7,089
Net income	$22,424	-$18,394

Beach Foods, Inc.
Balance Sheet
March 31, 1999

	1999	1998
Cash	$95,089	$41,488
Accounts Receivable	544,809	463,894
Inventory(LIFO)	442,588	480,950
Refundable Taxes		9,189
Total Current Assets	$1,082,486	$995,521
Other Assets	23,826	19,581
Property, Plant, & Equip	1,453,611	1,292,417
Less: Accumulated Depreciation	876,784	770,988
Total Assets	$1,683,139	$1,536,531
Notes Payable-Current	$148,832	$119,489
Accounts Payable	824,447	674,936
Accrued Expenses	12,298	16,560
Taxes Payable	13,223	10,582
Total Current Liabilities	$998,800	$821,567
Long-term Liabilities	185,084	238,133
Stockholder's Equity		
Common Stock	100,000	100,000
Retained Earnings	399,255	376,831
Total Liabilites and Equity	$1,683,139	$1,536,531

REVIVING A FLOUNDERING BUSINESS: A CASE STUDY OF A FAMILY BUSINESS WITH MULTIPLE PLANTS

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Inder P Nijhawan, Fayetteville State University

CASE DESCRIPTION

The case focuses on how to diagnose the symptoms of a failing business and devise strategies to restore it to solvency. The case is appropriate for an undergraduate senior level or graduate level managerial economics, finance, business policy and small business management courses. The case has a difficulty level of four and is designed to be taught in three class hours and is expected to take four hours of preparation outside of class.

CASE SYNOPSIS

Students are provided with a scenario of small business that is on the verge of failure. The case requires students to conduct SWOT, and internal and external factor analysis; compute critical financial ratios from the balance sheet and income statements; evaluate the costs and benefits of a plant closing; analyze the market environment by using RMA (Robert Morris & Associates) analysis and the Porter's five forces model of competition; project sales and cost estimates, and develop breakeven charts. To enable students to perform tasks described above, the following data is provided: financial statements for three years; sales data by each plant for 10 years; price comparisons between Sim's, Inc. and four other major competitors; and pertinent data for industry and RMA analysis.

INSTRUCTORS' NOTES

Teaching Objectives

1.	To show students how to conduct SWOT analysis.
2.	To demonstrate how to develop External and Internal Factor Evaluation Matrix.
3.	To acquaint students with the Michael Porter Five Forces Model and its application to a case study.
4.	To identify two major driving force in the industry and graphically show the relative position of major players.

5.	To demonstrate how to compute key solvency, equity, and profitability ratios, given the income and balance sheet statements of a firm and discuss their implications.
6.	To show the use of RMA for comparing a firm's vital ratios with its peers in the industry.
7.	To demonstrate how to develop the breakeven charts with a variety of scenarios.
8.	To explain if it would be beneficial for the company to close one of its plants. Clearly stating the assumptions underlying your analysis.

QUESTIONS AND DISCUSSION

1. Review the case study and list Sim's, Inc. Strengths, Weaknesses, 0pportunities and Threats (SWOT)

Table 1 SWOT MATRIX

STRENGTHS	WEAKNESSES
• Quality Products	• Lack of strategic Plan
• Over 50 years of Experience	• Inadequate Sales Force
• Over 1600 customers	• Poor Internal Communication
• No Long Term Debt	• Inadequate Market Coverage
• Financial Reserve	• Lack of Training for Sales Force
• Experience Workforce	• Underutilized Plants
• Minimal Inventory	• Lack of Cost Management
OPPORTUNITIES	THREATS
• Growing Market Trend	• Low Barriers to Market Entry
• Untapped Territories	• Small Workrooms
• Growing Demand for Product Line	• Decorators' Bargaining Power
• Availability of Skilled Sales Force	• Ready-made Substitute Products
• International Market	• Foreign Lower Labor Cost

Sim's, Inc. has several strengths that could be employed to take advantage of the potential opportunities. The custom bedding and accessories market is growing both at home and in selected foreign countries. There are skilled sales forces in the market that can be attracted by Sim's, Inc. Availability of skilled sales persons, could not only permit the company to penetrate in untapped territories, it enhance the level of service to decorators and in turn fend of the thread of small workrooms. The company obviously enjoys a healthy financial reserve, which makes it possible to deal with its weaknesses. Most of the current problems stem from a lack of strategic plan; including a well defined mission statement.

2. Review the case study and develop External and Internal Factor Evaluation Matrix.

Internal Factor Analysis

The following Internal Factor Evaluation Matrix explains how well Sim's, Inc. capitalizes on its strengths and creates a strong internal position. The factors in this table are the top five strengths and weaknesses from the SOWT analysis. Weights are assigned from 0.0 (not important) to 1.0 (extremely important) and are based on the relative importance of each factor in the industry. A 0-4 rating is assigned to factors to indicate the degree by which the company has successfully utilized the strengths and dealt with the weaknesses.

Table 2: Internal Factor Evaluation Matrix

	Weight	Rating *	Weighted Score
STRENGTH			
1) Quality Product	.15	4	.60
2) Skilled Workforce	.15	4	.60
3) Well Established-50 Yrs Exp.	.10	4	.60
4) No Long Term Debt	.03	3	.09
5) Financial Reserve	.07	3	.21
WEAKNESSES			
1) Lack of Strategic Plan	.15	0	0
2) Inadequate Sales Force &Training	.10	0.5	.05
3) Inadequate Cost Control	.05	1	.05
4) Poor Internal Communication	.10	1	.10
5) Underutilized Plants	.10	1	.10
TOTAL	1.0	---------	2.31

(a) Range of rating is 3-4 for Strength and 0- 2 for Weaknesses
Based on a maximum score 3.2, SIM's score of 2.31 shows that it does have a very strong internal position.

External Factor Analysis

The External Evaluation Matrix, shown in the following table, is developed to show how well the company capitalizes on the external opportunities and manages the threats. Weights are assigned from .0 (not important) to 1.0 (very important). The specific weight indicates the importance of the factor to succeed in the market. A rating 1 to 4, where 1 is the lowest and 4 the highest score, is assigned to each external factor to indicate how effectively the company current strategies respond to the specific factor.

Table 3: External Evaluation Matrix

	Weight	Rating *	Weighted Score
OPPORTUNITIES			
1) Growing Market	.10	1	.10
2) Untapped Territories	.15	1	.05
3) Growing Demand for Product Line	.10	2	.20
4) Availability of Skilled Sales Force	.10	1	.10
5) International Market	.02	1	.02
THREATS			
1) Low Barriers to Market Entry	.15	4	.60
2) Small Workrooms	.10	3	.30
3) Decorators' Bargaining Power	.15	3	.45
4) Ready-made Substitute Products	.08	4	.34
5) Foreign Lower Labor Cost	.05	1	.05
TOTAL	1.0	----------	2.21

The total weighted score indicates that Sim's, Inc. is well below the maximum of 4 in its efforts to pursue strategies that capitalize on external opportunities and deals with threats coming from the outside.

3. Using Porter's Five Forces Model, determine what competition is like and how strong are each of competitive forces in the industry

The Porter model is a composite of five competitive forces. The five forces are: A) rivalry among competitors in the industry, B) substitute products, C) the potential entry of new competitors, D) the bargaining power and leverage suppliers of inputs can exercise and E) the bargaining power and leverage exercisable by buyers. This model is a powerful tool for systematically diagnosing the chief competitive pressures in a market, assessing how strong and important each one is, and evaluating the potential profitability of the industry.

A. Rivalry Among Competing Fabricators

Rivalry among custom fabrication businesses is strong. The wholesale custom quitters and fabricators supply interior designers, drapery workrooms and fabric retailers. Although the number of large workrooms with 25-100 employees is small, there are numerous small 1-20 workers firms, which can duplicate each other, design and work and offer local services to local decorators. Hence, the market is competitive and rivalry among competing firms is putting downward pressure on prices and is squeezing the profit margin.

B. Competitive Pressures from Substitute Products

The substitute products for custom quilted bedding are the upscale "designer label" ready made. Brand name bedding such as Ralph Lauren and Laura Ashley are available in the department stores, boutiques and catalogues. While they do not provide customfabric and quilting, they are competitive in price and image. Further, research indicates that these products are becoming popular affecting the demand for fabricators and dampening the potential for price increases.

C. Potential Entry of New Competitors

The barrier to entry in the industry is very low; the availability of inexpensive hand-guided quilting systems since mid 80's has opened the door to a large number of micro fabricators. These entrepreneurs basically employ the same technology, hold hardly any inventory, and enjoy very low overhead. Considering that the customer loyalty is relatively low, the opportunity for potential entrants into the market is high.

D. Competitive Pressures Stemming from the Bargaining Power of Suppliers

Material used in the fabrication process, such as lining and polyester filling, is generic and is readily available in the market. Therefore, suppliers of raw material have hardly any bargaining power.

E. Competitive Pressures Stemming from the Bargaining Power of Buyers.

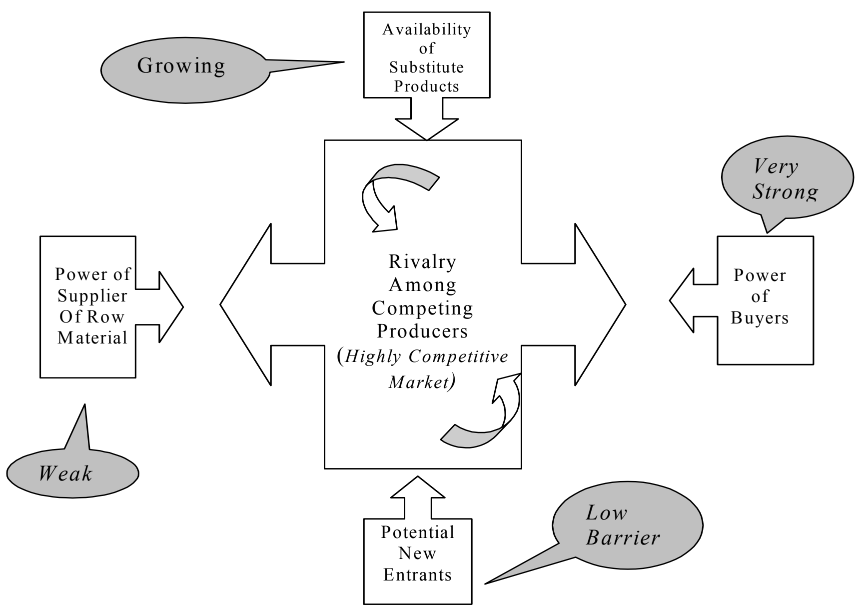
Weak brand loyalty, coupled with a low "switching cost" gives substantial bargaining power to the designers and fabric stores. Buyers can to a great extent dictate their own terms and squeeze the margin.

From the Five Forces Analysis it is evident that:

- ♦ Rivalry among fabricators is high
- ♦ Substitute products are gaining popularity
- ♦ The bargaining power that suppliers of inputs can exercise is very low
- ♦ The bargaining power and leverage exercisable by buyers is high. Given these characteristics, we can conclude that the market for custom fabricators appears to be very competitive with low profitability potential. Therefore, the only way to make above average profit in this industry is to carve a clear niche in the market.

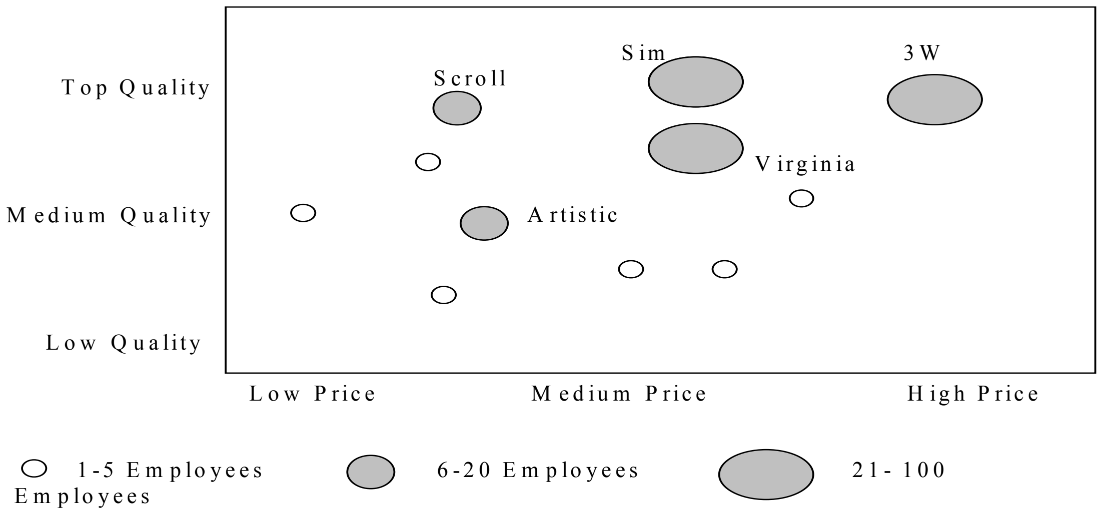
FIGURE 1 Five Forces Model

FIGURE 1 Five Forces Model



4. Using the information in the text, identify two major driving - force in the industry and graphically show the relative position of major players.

FIGURE 2 Strategic Group Map of Major Competitors



5. Examine the company's financial statements between year 1 and year 3 and compute liquidity, quick, profitability, leverage, and activity ratio.

Calculations for Year 3

1. **Liquidity Ratios**
   a. Current Ratio = Current Assets / Current liabilities = 444,436 / 13,318 = 33.37
   b. Quick Ratio = (Total Cash + Trade Accounts Receivables) / Current Liabilities = 144,805 + 49,682 / 13,318 = 14.60
   c. Total Liability to Net Worth = Total Liability/ Net Worth = 13,318 / 501,105 = 0.026

2. **Profitability Ratios**
   a. Pre-Tax Profit Margin = Profit Before Tax / Total Sales = (8365) / 1,065,134 = -0.79
   b. Net Profit Margin = Net Income / Total Sales = (8365)/1,065,134 = -0.79

3. **Leverage Ratio**
   a. Debt to Asset = Total Debt / Total Assets = 13,318 / 514,423 = 0.025

4. **Activity Ratios**
   a. Inventory Turnover = Total Cost Of Goods Sold /Total Inventory = 769,881/ 68,480 = 11.24
   b. Age of Receivables = Trade Account Receivable/ (Sales for year / 365) = 49,682 / (1,065,134 / 365) = 17

6. Compare and contrast the Sim's Inc. key ratios with RMA (Roberts Morris & Associates) indicators for the industry. Draw generalizations about the financial viability of the company.

Table 4 RMA Ratio Analysis			
SIM, Inc.	Dec. 31	Dec. 31	Dec. 31
Statement in Thousands $	Year 1	Year 2	Year 3
Ratios			
Operating Ratios:			
Sales Growth		**4.53**	**-4.06**
Pre-Tax Profit Margin	-5.09	-0.23	-0.79
Profit Margin	-5.09	-0.23	-0.79
Return on Assets (ROA)	-10.17	-0.48	-1.63
Return on Equity (ROE)	-10.48	-0.50	-1.67
Asset Turnover	2.00	2.07	2.07
Current Position:			
Current Ratio	**27.57**	**21.77**	**33.37**
Quick Ratio	10.42	8.97	14.60
Working Capital	421336	427176	431118
Working Capital/Assets	79.24	79.52	83.81
Working Capital Turnover	2.52	2.60	2.47
Receivable Turnover	11.72	15.56	21.44
Age of Receivables	31	23	17
Inventory Turnover	10.57	10.68	11.24
Days Supply in Inventory	35	34	32
Payable Turnover	51.88	49.02	65.81
Age of Payables	7	7	6
Equity Position:			
Owner Equity/Assets	97.02	96.17	97.41
Creditor Equity/Assets	2.98	3.83	2.59
Debt/Tangible Net Worth	**0.03**	**0.04**	**0.03**
Fixed Assets/Long Term Debt			
Fixed Assets/Tangible Net Worth	18.32	17.31	13.97
Plant Turnover	11.24	12.41	15.22

Table 4 RMA Ratio Analysis			
SIM, Inc.	Dec. 31	Dec. 31	Dec. 31
Statement in Thousands $	Year 1	Year 2	Year 3
Other:			
Interest Coverage (NPBT)			
Prin & Interest Coverage (NPBT)			
Interest Coverage (Operating Cash)			
Prin & Interest Coverage (OC)			
Sustainable Growth Rate	(-9.49)	(-0.50)	(-1.64)
Breakeven Sales - Cash Basis		1004363	1000249
Actual Sales/Breakeven Sales		1.11	1.06
Basic Defense Interval	113	115	121
Bankruptcy Ratio: Z value Z < 1.23 Weak; > 2.90 Strong	16.53	13.78	19.04

Table 5 RMA- Industry Comparison By Assets				
Sim Inc.	Dec. 31	Dec. 31	Dec. 31	RMA (11)
Statement in Thousands $	Year1	Year 2	Year 3	10MM-50MM
RMA Assets Comparison - SIC Code 2392 (Alternate Size Selected)				
Assets:				
Cash & Equivalents	14.0	21.1	28.1	0.3
Trade Receivables (net)	18.4	14.6	11.0	29.5
Inventory	14.4	14.2	13.3	38.5
All Other Current	35.5	33.6	33.9	1.3
Total Current	82.2	83.4	86.4	69.6
Fixed Assets (net)	17.8	16.6	13.6	24.7
Intangibles (net)	0.0	0.0	0.0	2.0
All Other Non-Current	0.0	0.0	0.0	3.6
Total Assets	100.0	100.0	100.0	100.0

Table 5 RMA- Industry Comparison By Assets				
Sim Inc.	Dec. 31	Dec. 31	Dec. 31	RMA (11)
Statement in Thousands $	Year1	Year 2	Year 3	10MM-50MM
Liabilities:				
Notes Payable - Short Term	0.0	0.0	0.0	21.2
Cur. Mat. - LTD	0.0	0.0	0.0	6.7
Trade Payables	2.9	3.1	2.3	16.9
Income Taxes Payable	0.2	0.2	0.1	0.1
All Other Current	-0.1	0.6	0.2	11.4
Total Current	3.0	3.8	2.6	56.3
Long Term Debt	0.0	0.0	0.0	8.8
Deferred Taxes	0.0	0.0	0.0	0.1
All Other Non-Current	0.0	0.0	0.0	4.4
Net Worth	97.0	96.2	97.4	30.4
Total Liabilities & Net Worth	100.0	100.0	100.0	100.0
Income Data:				
Net Sales	100.0	100.0	100.0	100.0
Gross Profit	24.1	26.9	27.7	18.3
Operating Expenses	29.4	27.1	30.2	14.7
Operating Profit	-5.4	-0.2	-2.5	3.6
All Other Expenses (net)	-0.3	0.0	-1.7	1.8
Profit Before Taxes	-5.1	-0.2	-0.8	1.8
RATIOS:				
Current	27.57	21.77	33.37	1.2
Quick	10.86	9.31	15.13	0.5
Sales/Receivables	10.88	14.18	18.80	6.4
Cost of Sales/Inventory	10.57	10.68	11.24	4.6
Cost of Sales/Payables	51.88	49.02	65.81	10.6
Days Receivables	33.54	25.74	19.41	57.0
Days Inventory	34.53	34.19	32.47	80.0
Days Payables	7.04	7.45	5.55	35.0
Sales/Working Capital	2.52	2.60	2.47	12.8

Table 5 RMA- Industry Comparison By Assets				
Sim Inc.	Dec. 31	Dec. 31	Dec. 31	RMA (11)
Statement in Thousands $	Year1	Year 2	Year 3	10MM-50MM
EBIT/Interest				1.2
Cash Flow/Cur. Mat. LTD				
Fixed/Worth	0.18	0.17	0.14	0.5
Debt/TNW	0.03	0.04	0.03	3.0
% Profit Before Tax/TNW	-10.48	-0.50	-1.67	2.5
% Profit Before Tax/Total Assets	-10.17	-0.48	-1.63	0.8
Sales/Net Fixed Assets	11.24	12.41	15.22	22.8
Sales/Total Assets	2.00	2.07	2.07	2.0
% Depr. Dep Amort/Sales	0.0	0.0	0.0	
% Officers Comp/Sales	0.0	0.0	0.0	

Table 6 RMA- Industry Sales Comparison				
Sim's Inc .	Dec.31	Dec. 31	Dec. 31	RMA (15)
Statement in Thousands $	Year 1	Year 2	Year 3	Over 25MM
RMA Sales Comparison - SIC Code 2392S				
Assets:	14.0	21.1	28.1	4.3
Cash & Equivalents	14.0	21.1	28.1	4.3
Trade Receivables (net)	18.4	14.6	11.0	27.7
Inventory	14.4	14.2	13.3	33.8
All Other Current	35.5	33.6	33.9	1.4
Total Current	82.2	83.4	86.4	67.1
Fixed Assets (net)	17.8	16.6	13.6	23.9
Intangibles (net)	0.0	0.0	0.0	2.1
All Other Non-Current	0.0	0.0	0.0	6.9
Total Assets	100.0	100.0	100.0	100.0
Liabilities:				
Notes Payable - Short Term	0.0	0.0	0.0	15.6
Cur. Mat. - LTD	0.0	0.0	0.0	5.2
Trade Payables	2.9	3.1	2.3	14.2

Table 6 RMA- Industry Sales Comparison				
Sim's Inc .	Dec.31	Dec. 31	Dec. 31	RMA (15)
Statement in Thousands $	Year 1	Year 2	Year 3	Over 25MM
Income Taxes Payable	0.2	0.2		
All Other Current	-0.1	0.6	0.2	9.5
Total Current	3.0	3.8	2.6	44.5
Long Term Debt	0.0	0.0	0.0	8.1
Deferred Taxes	0.0	0.0	0.0	0.2
All Other Non - Current	0.0	0.0	0.0	11.4
Net Worth	97.0	96.2	97.4	35.8
Total Liabilities & Net Worth	100.0	100.0	100.0	100.0
Income Data:				
Net Sales	100.0	100.0	100.0	100.0
Gross Profit	24.1	26.9	27.7	22.4
Operating Expenses	29.4	27.1	30.2	15.8
Operating Profit	-5.4	-0.2	-2.5	6.6
All Other Expenses (net)	-0.3	0.0	-1.7	1.8
Profit Before Taxes	-5.1	-0.2	-0.8	4.8
RATIOS:				
Current	27.57	21.77	33.37	1.7
Quick	10.86	9.31	15.13	0.8
Sales/Receivables	10.88	14.18	18.80	6.4
Cost of Sales/Inventory	10.57	10.68	11.24	4.7
Cost of Sales/Payable	51.88	49.02	65.81	11.4
Days Receivables	33.54	25.74	19.41	57.0
Days Inventory	34.53	34.19	32.47	78.0
Days Payable	7.04	7.45	5.55	32.0
Sales/Working Capital	2.52	2.60	2.47	9.1
EBIT/Interest				2.9
Cash Flow/Cur. Mat. LTD				
Fixed/Worth	0.18	0.17	0.14	0.5
Debt/TNW	0.03	0.04	0.03	3.0

Table 6 RMA- Industry Sales Comparison				
Sim's Inc .	Dec.31	Dec. 31	Dec. 31	RMA (15)
Statement in Thousands $	Year 1	Year 2	Year 3	Over 25MM
% Profit Before Tax/TNW	-10.48	-0.50	-1.67	23.4
% Profit Before Tax/Total Assets	-10.17	-0.48	-1.63	7.9
Sales/Net Fixed Assets	11.24	12.41	15.22	8.8
Sales/Total Assets	2.00	2.07	2.07	2.0
% Depr. Dep Amort/Sales	0.0	0.0	0.0	1.7
% Officers Comp/Sales	0.0	0.0	0.0	

Risk Identification Report - SIC Code 2392
12 Month Period Ending December 31, Year 3

General

Sales growth has slowed from 4.53% to (4.06)%. Are there any single major customers that have purchased less? New competition? Are the products/services stale?

The days of collection for accounts receivables has fallen from 23.45 to 17.03. This quicker collection is an improvement in the quality of receivables for Sim Inc. Investigation should be made to insure that the trend continues.

Days-in-Inventory is a measure of the management of inventory. When the number of days decreases, as they have for Sim Inc., it is taking the company 1.72 less day(s) to sell the same amount of inventory. This quicker turnover (32.47 days) is an improvement. Investigation should be made to insure that the trend continues.

Accounts payable days have fallen to 5.55 days. The payment of accounts payable has improved. Since the company is trending the right way, what are they doing to continue this trend?

Profitability

Profitability for the period has been more difficult to come by with the operating margin declining from (0.24)% to (2.49)%. This deterioration of (2.25)% places Sim Inc. below the median quartile breakpoint of 3.60%. This trend will need to be reversed if the company wants to build equity. What plans are in place to address this issue?

Operating leverage (OE/GP) for the current period has increased from 100.89% to 108.98%. This increase points to the fact that the closer this ratio gets to 100%, the smaller the cushion to cover other expenses & taxes. When the ratio is above 100% the cushion is gone and there is not enough gross profit to cover operating expenses. This trend needs to be reversed.

Other income did not cover other expenses (including interest expense) in the period ending December 31, Year 3. If this continues, it will put a burden on operating income. Is this an issue that needs to be addressed?

Net profit before tax and net profit before tax/tangible net worth have been trending down. The measure of profitability (NPBT/TNW) (1.67)% compared to the RMA, puts Sim Inc. below the median quartile breakpoint of 2.50%. If the company continues to earn less on its tangible equity, it will be harder for it to acquire and retain equity/debt funds. What plans does Sim Inc. have to reverse these trends?

Cash Flow

Cash from sales decreased due to a drop in sales. The drop in sales was greater than the change in receivables. Is there product obsolescence or recessionary market forces at work?

Cost of goods sold for the period ending December 31, Year 3 showed an improvement of $41,955 Thousand.

The following is a list of major changes in cash flow that need to be addressed. If they continue on their current trend into the future, cash flow shortages could be possible:

- Decrease in Net Sales.
- Accounts Payable has fallen.
- Operating Expenses have risen faster than net sales.
- Prepaid expenses have been a source of cash that is temporary.
- Future reliance of prepaids as a source should be reexamined.
- Other current assets & liabilities were a source of cash.
- Is this source of cash reliable and recurring?

Table 7 Financial Highlights			
Sim's Inc.	Dec. 31	Dec.31	Dec.31
Statement in Thousands $	Year 1	Year 2	Year 3
Highlights			
INCOME STATEMENT:			
Sales	1062089	1110154	1065134
Gross Margin	255448	298318	295253
Operating Expenses	312640	300974	321781
NPBT	-54078	-2584	-8365
NPAT	**-54078**	**-2584**	**-8365**
Cash Dividends	0	0	0
BALANCE SHEET:			
Total Current Assets	437193	447742	444436
Net Fixed Assets	94514	89430	69987
Total Assets	531707	537172	514423
Short Term Obligations	0	0	0
Total Current Liabilities	15857	20566	13318
Long Term Debt	0	0	0
Total Liabilities	15857	20566	13318
Net Worth	515850	516606	501105
RATIOS:			
Sales Growth		-4.53	-4.06
Gross Margin	24.05	26.87	27.72
Profit Margin	-5.09	- 0.23	-0.79
Current Ratio	**27.57**	**21.77**	**33.37**
Quick Ratio	10.42	8.97	14.60
Working Capital	421336	427176	431118
Age of Receivables	31	23	17
Days Supply in Inventory	35	34	32
Age of Payables	7	7	6

Table 7 Financial Highlights			
Sim's Inc.	Dec. 31	Dec.31	Dec.31
Statement in Thousands $	Year 1	Year 2	Year 3
Debt/Tangible Net Worth	**0.03**	**0.04**	**0.03**
Breakeven Sales - Cash Basis		1004363	1000249
Actual Sales/Breakeven Sales		1.11	1.06
CASHFLOW: Incr (Decr) in Cash			
Cash From Sales		1125696	1085501
Cash From Trading		15141	318315
Net Cash After Operations		**30031**	**19391**
Cash After Financing Costs		30031	19391
Cash After Debt Amortization		30031	19391
Capital Expenditures		5084	19443
Financing Surplus (Requirement)		35115	38834

7. Examine the company's income statement and develop breakeven charts for the entire company and for each plant.

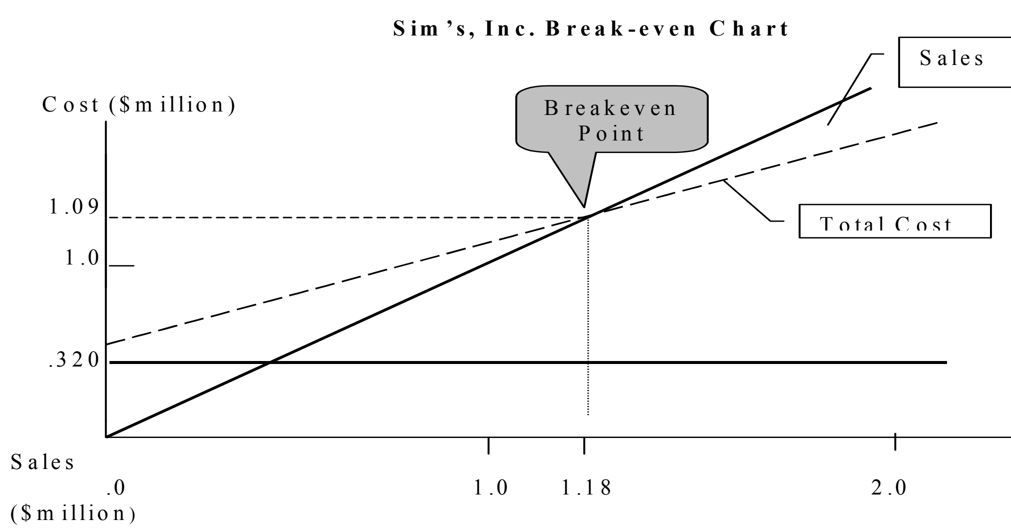


Table 7 Cost and Revenue for Year 3			
	Location Jefferson	Location Glover	Total
Sales	$563,676	$501,458	$1,065134
Fixed Cost	$161,398	$159,101	$320,499
Variable Cost	$420,432	$349,449	$769,881

Contribution Margin: $1,065,134 - $769,881 = $295,253
Contribution Ratio: $295,253/$1,228,852 = 0.27
Breakeven Point Sales: $320,499 / 0.27 = $1,187,033.33

Total sales have to increase by $121,899.33 ($1,187,033.33 - $1,065,134) or 11.4 percent for the company to breakeven.

A similar process could be followed to determine the BEP for each plant separately. In this way, one could compare and contrast the two plants and conduct sensitivity analysis to investigate the impact of cost cutting measures on BEP.

8. **Examine the income statements for the Jeferson and Glover plants, and explain if it would be beneficial for the company to close one of its plants. Clearly stating the assumptions underlying your analysis.**

Sim's, Inc. has two plants: one located in Jefferson city and the other located in the Glover city - about two hundred miles from the headquarter. None of the plants has the location advantage either in terms of raw materials or market proximity. An analysis of the income statements for the two plants reveals the following results:

Breakeven Sales for Jefferson	
Contribution margin	$563,676- 420,432 = 143,244
Contribution ratio	$143,244 / 563,676 = 0.25
Breakeven point	$161,398 / 0.25 = $645,592

Accordingly, sales in the Jefferson plant must increase by $81,916 ($645,592 - 563,676) or by 14.53 percent to breakeven.

Breakeven Sales for Glover	
Contribution margin	$501,458 - 349,449 = 152,009
Contribution ratio	$152,009 / 501,458 = 0.30
Breakeven point	$159,101/0.30 = $530,336.66

Accordingly, sales in the Glover plant must increase by $28,878.66 ($530,336.66 - 501,458) or by 5.7 percent to breakeven.

We believe that neither plant should be shut down because the increase in sales required is well within reach of Sim's, Inc. This recommendation is based on:

- Growing market
- Implementation of a focused marketing strategy
- Underutilization of existing capacity

ENDNOTES

We gratefully acknowledge the assistance of Ammir Khan, Kimberlee Bizub and Sandra Auckland in data collection and compilation.

FLORIDA FOODS

Joseph M. Sulock, University of North Carolina-Asheville

CASE DESCRIPTION

The primary objective of Florida Foods is the evaluation of a proposed expansion of one of the company's stores, and is best used in any course where the students have a background in capital budgeting.. This suggests that it is probably most appropriate in the upper-level undergraduate (where we use it) or first-year graduate course in corporate finance, or a strategic management class. An important secondary objective is to address some financial performance measures that are often used to evaluate a company. Other objectives include the opportunity to explore real versus nominal discount rates and sensitivity/scenario analysis.

The required amounts of class time and student preparation depend on 1) the topics the instructor chooses to cover and 2) whether students have access to the template that accompanies the case. Certainly one class is ample for instructors who focus only on the capital budgeting issues, and student preparation should require a maximum of five hours. Allow an additional class to adequately cover the evaluation aspects. Student preparation to cover all issues should run eight to ten hours without the template.

CASE SYNOPSIS

This case is based on a situation involving a friend of the author's, and could be used for role-playing, writing assignments, and student presentations. The setting involves an energetic and ambitious store manager who has decided to submit to home office an evaluation of a possible expansion of the store. An unexpected development is that the regional manager has informed him that he is being considered for one of the positions at the home office that will become open in the next few years. It is clear that the home office is not just interested in whether an addition to the property makes sense. Top management is also interested--and perhaps more so-- in whether he has the "right stuff" for a higher- level executive position and, hence, the evaluation will be viewed by top management as a test.

Another angle is his concern over the impact of the expansion on a number of financial measures used to evaluate a store's performance. These include the return on investment, return on equity and economic value added, all measured at book values. Thus projections of these statistics will be made with and without the expansion. Of interest is that these statistics do not necessarily "improve" with the implementation of this highly positive NPV project

The case has two Excel templates that contain pages relating to the computational questions listed in the Instructors' Notes, and are useful for performing sensitivity/scenario analysis so characteristic of real-world forecasts. The case can be done without them but are included to *expand its versatility. One template is complete in that all the appropriate formulas have been entered. The other lacks a number of key formulas that the students must enter in order to use the template effectively. The Instructors' Notes offers suggestions on how the case and templates might be used in both lower and upper level courses.*

INSTRUCTORS' NOTES

Suggestions for Using the Case

We think the case has much versatility and could be used in the first or second undergraduate corporate finance course, a first year MBA course, a managerial accounting or strategic management course. Here are some specific suggestions.

1. Focus only on getting the project's incremental cash flows and NPV. Consider discussing in class other issues raised by the case. This should make it usable in the first undergraduate finance course.
2. Focus on the evaluation measures. In our view this is a topic that deserves more attention since managers in the real world are frequently evaluated using the accounting-based statistics mentioned in the case. Taking this approach means that the case is suitable in any class where these measures are discussed in some depth.
3. Emphasize oral presentations and written reports. Divide students into groups of two or three. Give each group the completed spreadsheet. Assign all questions. Require a write-up of Question 9 from all groups and an oral presentation from at least some.

   A variation on this is to give students the answers to all questions except 9. The assignment, therefore, is to take all this information and develop a clear, organized, and convincing report. And at least a few students or student groups could develop presentations as well.
4. Give students the unfinished (student) template and focus on the capital budgeting aspects of the case. This will sharpen their computer skills with a finished product that is useful for addressing the what-if questions that analysts frequently encounter.
5. Emphasize development of a dynamic spreadsheet model

   First, let's explain the difference between a "static" versus a "dynamic" spreadsheet model. The former is a model where cells exist in isolation unconnected to other cells. For example, the cell containing the NPV formula might simply contain the actual discount rate. Or the cells that compute the annual estimated profit might be unconnected to the cells that compute the cash flow. If the model is static, therefore, it will be extremely difficult to perform sensitivity/scenario analyses. A "dynamic" model, on the other hand, contains a bunch of interrelated cells. Using our previous examples, the profit cells will be linked to the cash flow cells, the NPV function will reference a cell where the analysts can change/input the discount rate.

Thus, another use of this case is to have students develop a dynamic spreadsheet model capable of computing all the annual cash flows, the NPV and the IRR. We've used this approach in other cases requiring a forecast. Our students, though they will have seen the dynamic spreadsheet models used in earlier cases, need guidance. We would tell them something like the following. "First, think about what you want your inputs and outputs to be. Then develop a page that forecasts adjusted working capital, one that forecasts the incremental cash flows, and one that computes the NPV and IRR. Make sure the model is truly dynamic."

When we use a case this way, we don't tend to make the students responsible for the remaining issues. Instead, we simply discuss them in class.

SIDEPOINT

Quite a few students over the years have really gotten into the development of spreadsheet models that aid in decision making. A number have even incorporated such models in their senior thesis and in later employment. The most recent example is a student whose senior project involved assisting a local developer with the valuation of a golf course. Part of the project involved a spreadsheet model capable of performing sensitivity/scenario analyses.

QUESTIONS AND SUGGESTED RESPONSES

1. **Any capital budgeting forecast requires that the analyst select a time horizon. FF uses a ten year period though it is easy to find examples of companies that use different time periods. Firms in the medical supply industry, for example, prefer a shorter horizon, perhaps five years. Firms in the paper industry have been known to go as long as twenty years. What are some factors that influence the time horizon used?**

Certainly the business risk of the industry influences this decision. Firms that manufacture paper products, for example, sell items with a relatively stable demand and operate in an industry with relatively little technological change. A computer company, on the other hand, operates in an industry subject to significant product change and demand volatility.

The "comfort zone" of the forecaster will also influence this decision. This, of course, will be influenced not only by the personal biases/preferences of the forecaster, but also the business risk of the industry.

2. a) **Florida Foods uses a 15 percent nominal cost of capital (required return) for the evaluation of capital budgeting projects. Assuming a four percent expected inflation rate, the case states that this implies a real return of 10.6%. How was this determined?**

Chandler apparently applied the Fisher equation as follows.

$r_{real} = (1+rnominal)/(1+inf) - 1 = (1+.15)/(1+.04) -1 = .106.$

b) It also uses a mix of 40 percent debt and 60 percent equity. Assuming a 7% nominal borrowing rate and a 30 percent income tax rate, what does all this imply about the company's real cost of equity , i.e. its inflation-adjusted required return on equity)?

First, let's get the real borrowing rate by applying the above Fisher equation.

$r^{b}_{real} = (1+.07)/(1+.04) -1 = .029$

Now we apply the familiar weighted average cost of equation and solve for the real cost of equity. Keep in mind that the target capital structure is 40% debt and 60% equity, and the income tax rate is 30%.

$r_{real} = .106 = .4 * .029 * (1-.3) + .6 * re_{real}$

Solving for re_{real}, the real cost of equity, yields .170 = 17%.

3. How should his analysis consider both the cost of the home office and the distribution and warehouse center? Explain.

The key here is whether the expansion will cause a change in the above costs and it appears--based on information in the case about the capacity of the distribution center and the professional opinion of Lewis--that any impact will be rather small.

Thus, even though the firm's accountants require that a store's income statement include a charge of 1% of sales for corporate overhead/support, we think it is reasonable to ignore this for the evaluation.

We also think it is reasonable to conclude--as Lewis does--that any impacts here will, in fact, be minimal. The distribution center has plenty of capacity, and the impact on the home office should be minimal. For example, there will still be an annual on-site visit whether or not the store expands. True, more time may be required to support a larger store but this is probably not a big deal especially if support personnel can handle this additional work without a reduction in their efficiency.

4. Estimate the incremental sales of expanding the store.

Year:	1	2	3-10
Sales, no expansion	$ 5,250.0	$ 5,250.0	$ 5,250.0
Sales, expansion	4,200.0	7,875.0	11,825.0
Incremental Sales	-1,050.0	2,625.0	6,575.0

5. What will be the impact each year on the store's adjusted working capital?

The case states that the store's working capital is considered to be "pretty typical," and the information in Exhibit 1 implies that adjusted working capital is 3% of sales. Given this, working capital is estimated to equal 3% of sales.

Year:	0	1	2	3	4-10
Sales, expand		$ 4,200	$ 7,875	$11,825	$11,825
Adjusted WC	$157.5	$ 126.0	$ 236.3	$ 354.8	$ 354.8
Change=Impact		-$ 31.5	$ 110.3	$ 118.5	$ 0.0

6. a) Estimate the annual incremental operating cash flows of the expansion.

Incremental sales are from Question 4. CGS is 25% of incremental sales and Gen & Adm 13%, per the information in Exhibit 2. Depreciation was given in the case, as were the "facelift costs." Taxes are 30% of EBIT. The "Change in Adjusted Working Capital" is from Question 5. Capital spending is 1% of incremental sales for years 2-10, per the case. For year 1, it equals the $300(000) of construction costs plus this 1% (note that due to the projected decrease in sales, the "1%" will be negative).

Year:	1	2	3	4-6	7	8-10
Incremental Sales	-$1,050.0	$2,625.0	$6,575.0	$6,575.0	$6,575.0	$6,575.0
CGS	-787.5	1,968.8	4,931.3	4,931.3	4,931.3	4,931.3
Gross Margin	-262.5	656.3	1,643.8	1,643.8	1,643.8	1,643.8
General & Adm.	-136.5	341.3	854.8	854.8	854.8	854.8
Depreciation	210.0	243.3	243.3	243.3	243.3	243.3
"facelift costs"		-400			500	
EBIT	-336.0	471.7	545.7	545.7	45.7	545.7
taxes	-100.8	141.5	163.7	163.7	13.7	163.7
Net Income	-235.2	330.2	382.0	382.0	32.0	382.0
+Depreciation	210.0	243.3	243.3	243.3	243.3	243.3
-Chng. Adj WC	-31.5	110.3	118.5	0.0	0.0	0.0
-Cap Spending	289.5	26.3	65.8	65.8	65.8	65.8
Oper. Cash Flow	-$283.2	$437.0	$441.1	$559.6	$209.6	$ 559.6

b. Estimate the project's net present value and internal rate of return. Keep in mind that Chandler intends to use an 11% real cost of capital (required return).

The net present value estimate is $1,471(000) and the IRR--a real return, by the way--is 19.4%. These numbers are based on the previous operating cash flows, the up-front cost of $2.1 million and the terminal value of $3,945(000) = 5 times year-ten EBDIT.

We think it is of interest that the present value of the above operating cash flows is $2,181.4(000), and thus is (slightly) above the up-front cost. Thus, ignoring the terminal value completely still results in a positive NPV.

c. Suppose that top management asks Chandler to perform the analysis in nominal terms. How would this effect estimated NPV in 6-b? What about the IRR?

The NPV would be unaffected since it would be in current (2002) dollars. Looked at a bit differently, using nominal amounts would increase our cash flows by the rate of inflation. At the same time, we would adjust the discount rate for inflation as well (use the nominal versus the real rate). These two effects would precisely cancel out.

The IRR is a different matter since it is a real rate in 6-b. When we adjust for inflation, the IRR will be a nominal rate and will equal 24.2%, using the Fisher equation.

7. **FF's top management uses the ROI, ROE and EVA as computed in Exhibit 3 to help it assess the performance of the company and its individual stores. What are the advantages and disadvantages of each of these statistics?**

All three are based on book and not economic values. Yet given the difficulty of estimating economic values, this appears to be a disadvantage that analysts will simply have to live with.

The ROE is influenced by the use of debt (capital structure) though this is not likely to be issue here since top management controls the debt policy (see Exhibit 3 and Question 8-a).

All three make an attempt to adjust for the scale of an investment which should make managers conscious of the amount of capital employed. Contrast this with a measure, say "profit", that does not. In this case managers will have less incentive to economize on assets especially if an increase in assets will generate an increase in profit.

Further, they are all based on easily attainable information.

The ROI and ROE are a bit like the internal rate of return (IRR) in that they are return measures. Consequently they have a disadvantage similar to the IRR's. Recall that the IRR may give a misleading signal about which of two mutually exclusive projects to choose when the projects differ significantly in their up-front costs (capital requirements).

Store A might have an ROI and ROE that are lower than Store B's, yet Store A could easily be more valuable to stockholders. Suppose a company thinks an ROI above 15% is good. Say that Store A has invested capital of $500 and EBIT less taxes is $125. Thus its ROI is 25%. Suppose Store B has invested capital of $300 and EBIT less taxes is $90, yielding an ROI of 30%. It appears that B is more valuable. But note that the additional capital of $200 of A results in an extra $35 for an "incremental ROI" of 17.5%.

EVA seems more consistent with value maximization and the net present value method. The idea is to maximize value and, while EVA measured with book values is admittedly imperfect, it still gives us some idea about how much value is being generated and seems to overcome the "size problem" of the ROI and ROE.

We return to these issues in the next question.

8. a) **Chandler is concerned about how the store will look each year in his annual performance evaluation. The table below presents estimates on the store for the next three years assuming no expansion. All dollar amounts are in nominal terms. That is, the figures are not adjusted for inflation.**

Develop such a table for the store assuming the expansion is undertaken. Keep in mind that top management wants a capital structure of 40% debt and 60% equity (see Exhibit 3).

Projected Evaluation Measures of the Store with No Expansion. Nominal Dollars ($000s)			
Year:	1	2	3
Adj WC	$ 163.8	$ 170.4	$ 177.2
Net Fixed	1300.2	1257.3	1212.8
Total Assets	$1,464.0	$1,427.7	$1,389.9
Total Equity	$ 878.4	$ 856.6	$ 834.0
Net Income	$ 264.7	$ 275.3	$ 286.3
EBIT-taxes	$ 296.0	$ 307.9	$ 320.2
ROI:	20.2%	21.6%	23.0%
ROE:	30.1%	32.1%	34.3%
EVA:	$76.4	$93.7	$111.7

The numbers were calculated as follows. Net fixed, new project: For year 1 we added the up-front amount of $2,100 and the $300 in year 1. We then netted out the year-one depreciation of $210. Since all these are in real terms, we increased the resulting amount by the 4% inflation estimate.

For year 2, we took year-two capital spending and netted out depreciation. This amount was adjusted for inflation and then added to the year-one amount. Similar reasoning was used for year 3.

Net fixed, no expansion. Taken from the table in the question.
Adjusted working capital: the amounts from Question 5 adjusted for inflation.
All EBIT amounts are simply the previously given real values, adjusted for inflation.

Interest is the amount of debt multiplied by the 7% borrowing rate given in the case.

EVA is a nominal amount and is based on the 15% nominal cost of capital.

Projected Evaluation Measures of the Store with Expansion. Nominal Dollars ($000s)			
Year:	1	2	3
Net Fixed, new project	2,266.7	2,031.9	1,832.1
Net Fixed, no expansion	1,300.2	1,257.3	1,212.8
Net Fixed, Total	$3,566.8	$3,289.2	$3,044.9
Adj WC	$ 131.0	$ 255.5	$ 399.0
Total Assets	$3,697.9	$3,544.7	$3,443.9
Debt(40%)	$1,479.2	$1,417.9	$1,377.6
Equity(60%)	$2,218.7	$2,126.8	$2,066.4
EBIT, no expand	$ 422.9	$ 439.8	$ 457.4
Incremental EBIT	-$349.4	$ 510.2	$ 613.8
EBIT, total	$ 73.5	$ 950.0	$1,071.2
Taxes on EBIT	$22.04	$ 284.99	$321.37
EBIT-Taxes	$ 51.4	$ 665.0	$ 749.9
EBIT	$ 73.5	$ 950.0	$1,071.2
interest	$103.5	$ 99.3	$ 96.4
EBT	-$ 30.1	$ 850.7	$ 974.8
Taxes	-$ 9.0	$ 255.2	$ 292.4
NI	-$ 21.0	$ 595.5	$ 682.4

Year:	1	2	3
ROI:	1.4%	18.8%	21.8%
ROE:	-0.9%	28.0%	33.0%
EVA:	-$503.3	$133.3	$233.3

8. b) If you were Chandler, would you be concerned about how the store will look in his annual performance evaluation? Explain.

Recall that this project has a highly positive NPV and one would think that a value-maximizing project will eventually show up in the financial evaluation statistics. Yet, it is interesting that neither the ROI nor the ROE projections look better--even by year 3--than these statistics under "no expansion." The main problem--the issue of scale--was discussed in Question 7.

The EVA, on the other hand, shows a nice gain over the "no expand" projection for year 2 and a rather substantial gain in year 3.

Of course, all three look downright poor in the first year mainly because sales during year one are estimated to take a rather large hit.

Would we be concerned if we were Chandler? After all, the evaluation measures are not projected to look especially impressive. Further, all three measures in year 1 will catch the attention of top management based on the comments of Lewis in the case. Despite all this, we would not be concerned. It appears to us that top management is at least reasonably sophisticated in finance: it accepts an analysis in real terms, it does recognize that the performance measures are based on book values and, after all, this is a highly successful company. Further, we suspect that the "behavior" of the EVA statistic--and the other two as well-- is pretty typical for a store expansion.

What follows is something we've only discussed with our more interested and talented students.

It could be instructive to explore what the project's ROI and EVA would look like during the first three years if an analysis were based on economic and not book values. First, let's present the EVA and ROI for the project using book values, and we used the Fisher equation to modify the nominal rate slightly to be consistent with the 11% real rate (15.44% vs 15%).

Book Values (Nominal Dollars)				
Year:	0	1	2	3
Adj WC		-33	85	222
Net Fixed		2,267	2,032	1,832
Total		$2,234	$2,117	$2,054
EBIT-Taxes		-$ 245	$ 357	$ 430
ROI		-10.9%	16.9%	20.9%
EVA		-$589.5	$ 30.2	$ 12.5

Using economic values, we get the results in the next table. Value is the "present" value of the remaining cash flows. For example, in year 0 the Value of $3,571 is the present value of the cash flows for years 1-10. For year 1, it would be the value at the end of year 1 of the cash flows for years 2-10. Cash flow is the actual cash in/out resulting from the project. Now economic income for some period of time equals the CF from the project PLUS the change in the present value of the remaining cash flows. The logic here is quite consistent with the following idea about stocks. The impact of a stock on your wealth over a year equals the dividends received PLUS the change in the market value of the stock.

Note that EVA in year 0 is simply the project's NPV. In later years, we need to deduct the cost of capital from economic income. This cost is measured as the nominal rate times the value in the preceding period. Note that EVA is zero for years 1, 2 and 3.

The ROI is computed as economic income divided by "value" of the preceding period. Note that it exactly equals the cost of capital in each year.

Economic Values (Nominal Dollars)				
Year:	0	1	2	3
Value:	$3,571	$4,417	$4,626	$4,844
CF	-2,100	-295	473	496
Chng Value	3,571	846	209	218
Economic Income	$1,470.8	$551.3	$681.9	$714.2
EVA	$1,471	$0	$0	$0
ROI		15.4%	15.4%	15.4%

9. Chandler has been instructed by Florida Foods' home office to develop and submit a proposal to expand the store. Write a one-two page single-spaced memo that Chandler could use based on your previous calculations, information in the case, and any other information you think is relevant. And keep in mind that he must make a recommendation on whether it is a good idea to expand the facility.

Attention instructors. In the memo that follows there is a reference to "Attachment 1." This is not shown here since it is the table in Question 6-a.

To: Home Office

From: George Chandler

Subject: Expansion of the Riverton Store

Background The Riverton store is a 25,000 square foot facility with annual sales of $5.2 million. This is about $210 per square foot, which is near the top for stores of its size. The area around the store has grown in the last five years and this growth is likely to continue. Traffic count has increased by 50% in the last five years, two major housing developments and one apartment complex are under construction within a few miles of the store, and the Chamber of Commerce continues its efforts to promote the area to retirees and businesses.

There is limited local competition. Pathway opened a modest and not very attractive 20,000 square foot facility two years ago that seems to be doing rather well. Thus, no state-of-the-art supermarket exists in the region at the present time.

Sales Estimates The table below shows forecasted sales in real(2002) dollars for the customary ten-year period. The estimates have been reviewed by Roberta Lewis and seem quite reasonable given the previous information and that they are consistent with other major renovations that the company has made.

Year:	2003	2004	2005-12
Sales:	4,200,000	7,875,000	11,825,000

Cash Flow Estimates The analysis was conducted in real terms, so all amounts reflect 2002 dollars.

Construction costs are estimated to be $2.1 million up front with an additional $300 thousand in year 1. Annual cash costs are consistent with our other stores. CGS is assumed to run 75% of sales and G&A costs 13% of sales. No charge was assessed for "support costs" since it appears that these will not be affected by the expansion.

The numbers also consider that a $400,000 facelift of the store scheduled for 2004 will be unnecessary but that a $500,000 one will be required in 2009. The after-tax terminal value is estimated at five times year-ten EBDIT per company policy.

The table below summarizes the ten-year cash flows. Numbers are in thousands of 2002 dollars. Attachment 1 gives a detailed breakdown of the operating cash flows.

Year:	2002	2003	2004	2005	2006-08	2009	2010-11	2012
Cash Flow:	($2,100.0)	(283.2)	437.0	441.1	559.6	209.6	559.6	4,504.6

Evaluation Measures The company typically uses a fifteen percent nominal cost of capital. The analysis assumes a four percent inflation rate and was conducted in real terms, so the discounted cash flow analysis used an 11% real return.

NPV is estimated to be $1.47 million, and the IRR 19.4% and represents a real return. It is of interest that ignoring the terminal value completely still results in an NPV of about $200 thousand.

Recommendation The evaluation--in my judgment--strongly indicates that it is a prudent investment to expand the store. The NPV is highly positive and remains positive even assuming a zero terminal value. Further, the cash flows may be a bit conservative given that only inflationary increases in sales were assumed after year 3 and the region may well continue to grow. Finally, the expansion may be necessary for a defensive reason: to keep a rival firm like Pathway from opening a state-of-the-art facility in the region.

10. (Software Question)

a) Lloyd Weinberg, the company's chief financial officer, has e-mailed Chandler two scenarios that he wants evaluated. These are shown below.

For each scenario, compute the NPV and IRR.

Scenario:	Pessimistic	Optimistic
Annual sales:	15% less	15% more
cap spending, year 0:	$2,400(000)	$1,850(000)
real discount rate:	.13	.09
TV, EBDIT multiple:	4	6
Other values:	No Change	No Change

Pessimistic scenario: NPV = -270(000) and the IRR is 11.2%.
Optimistic scenario: NPV = 3.76 million and the IRR is 27.1%.

b) Weinberg has asked Chandler "How, if at all, do the results of these scenarios affect the recommendation in your memo?". How should Chandler respond?

We think these results strongly reinforce the recommendation. The NPV of the pessimistic scenario is rather small, while the one in the optimistic scenario is quite large. Thus it appears that the project risks little and stands to gain a great deal.

EPILOGUE

Top management did decide to expand the store (it has been a big success) and we would like to claim that it was due solely to the evaluation of Chandler. This, however, is not true. Apparently top management was seriously considering an expansion, anyway. Still Chandler's report was considered very useful and did impress the home office. In fact, he was offered a position at the home office within two years but declined (personal reasons).

Of interest is that the financial statistics of the store did look pretty miserable in the first year of the expansion, but home office sent Chandler an "e-mail of accommodation" anyway. Why? Apparently the numbers looked "less miserable" than those of previously renovated stores.

THE MAGIC OF MEVATEC

Linda B. Shonesy, Athens State University
Dawn Tucker, Mevatec Corporation
Robert D. Gulbro, Athens State University

CASE DESCRIPTION

This case is intended for use in undergraduate entrepreneurship or management courses. The primary subject matter of this case concerns the growth of a small business based upon entrepreneurial leadership and vision of the owner and founder. This case allows the student to carefully evaluate an organization's corporate culture and corporate strategies; and to determine the relationship of culture to financial and strategic success. It also enables the student to identify the challenges that many organizations are facing today, with the downsizing that is occurring in both the government and in the private sector. This case is designed for one to two hours of class time, and is expected to require two to four hours of outside preparation.

CASE SYNOPSIS

This case concerns an entrepreneur who used a nurturing leadership style, an entrepreneurial vision, empowerment of employees, and a competitive company culture to guide company growth This culture is referred to as "Mevatec Magic" and places an emphasis on individual development. Mevatec is a unique organization that uses scientists, engineers, and business professionals, who apply creative insight along with advanced technologies to assist government and industry to solve daily problems (www.mevatec.com/compinfo/intro). Nancy Archuleta bought Mevatec, a manufacturer of commercial electronic components, in Las Cruces, New Mexico in 1985. However, in 1987 this new business was in trouble, and she had to lay off 75% of her employees when she lost a major contract. Ms. Archuleta made a decision in 1988 to transition to the government high-tech services sector, because she learned that she must not depend upon one contract for survival. The company reduced their dependence on defense work from nearly 100% of revenue to an estimated 60% by 1996 (Mevatec Corporation, 1999).

In 1989, the company moved to Huntsville, Alabama, where revenues have soared from $50,000 in 1988 to over $100 million in 2002 (About Mevatec, 2003). They have diversified into aerospace engineering, management services, and information technology. Mevatec's customer base is well diversified, but the United States Army is the largest customer. The fastest growing business base is in the area of assisting commercial and government entities in driving down costs and improving customer service (Mevatec Corporation, 1999).

INSTRUCTORS' NOTES

RECOMMENDATIONS FOR TEACHING APPROACHES

Learning objectives

- Students will learn the value and contribution of the CEO and an organization's leadership.
- Students will see the contribution that organizational culture makes in the success of the organization.
- Students will see that diversity has value by seeing the ability of a woman to grow a company into a large and successful government contractor.

Position in the course

This case should be used in a course after the students have been exposed to discussions about leadership and about organizational culture.

Student preparation

Students should spend two to four hours reading the case and relating their reading to such textbook topics as diversity, organizational culture, and leadership.

Related theories

Students could relate this case to the study o ledership style, transformational and charismatic leadership, and the value of diversity.

Teaching methods

- The instructor should serve as a moderator of class discussion about the case.
- The instructor could divide the class into groups and have each group discuss the case separately and then come together to recap.
- The instructor could assign the case to a group for presentation to the rest of the class.

DISCUSSION QUESTIONS AND ANSWERS

1. **What generic and grand strategies are used by Mevatec, and how does Nancy Archuleta's management philosophy support the use of these strategies?**

   Mevatec competes using a best-cost provider strategy. They create a competitive advantage by giving customers better value, quality, and service for their money. The company has kept costs down and customer service at a premium. They also use a differentiation strategy by blending scientists, engineers, and business professionals, who use advanced technologies in a creative manner to solve problems for their customers in the public and private sectors. Mevatec's unique internal expertise provides customers with quality that allows this strategy to continue.

Mevatec has pursued a growth strategy in recent years by seeking to increase their customer base in the private sector, as well as, the public sector. They have expanded from as few as eight employees in 1987 to over 475 employees today. They have over 10 different site locations across the country to accommodate customers in all areas of the country. This growth along with a stable customer base has created a successful strategic outlook in recent years. This could also be considered related diversification, as they have expanded into similar work, but in areas other than government contracts. As they found business in the private sector, their percentage of revenues grew to over 40% in that arena. Of course, in past years a turnaround strategy was used, where 75% of their employees were laid off and family members ran the company until it was on solid footing again.

Ms. Archuleta currently operates under a decentralized management philosophy. She focuses management on the most critical areas and empowers her program managers to run their own programs to gain customer satisfaction, as well as, employee satisfaction. She believes in her people and their abilities. Empowerment of employees is central to her philosophy. She believes that the way you treat the employee would encourages them to do their best, which fosters quality and good customer service.

The various strategies that have been used are based upon needs of the company at the particular time. The fact that Ms Archuleta's management philosophy allows her employees to assist with the decision-making has fostered the successful implementation of the strategies chosen. When employees are empowered, they have a vested interest in seeing that a company succeeds. This trust has allowed Mevatec to progress from turnaround to diversification to growth, always seeking to provide the best cost and quality for the customer. In addition, Ms. Archuleta's philosophy that she must leave the world a better place than she found it leads her to provide her employees all of the tools with which to be successful. She feels that successful employees will lead to a successful company, and she truly believes that Mevatec can make a difference in this world.

2. Describe this company's corporate culture and discuss how it supports the employee.

This company possesses a very unique corporate culture, which includes an emphasis on quality and customer satisfaction, as evidenced by the enthusiasm of the staff. This company stays focused on the needs of employees and their families. Staff development is valued, so employees can assume increasing levels of responsibility. Employees begin interfacing with customers to build skills and self-confidence. Service to the community is strongly encouraged to give back to those that support the company. This company places emphasis on maintaining a healthy balance with work and family in a challenging environment. There is mutual trust between management and the employee. This is a strong, but adaptive culture. It is innovative and flexible. The culture could be described as a family environment.

3. How has Nancy Archuleta's background contributed to her success? What specific entrepreneurial traits does she possess?

Ms. Archuleta's background became a driving force in her quest to make a difference in this world. She grew up in a poor household, dropped out of school, and had four children by the time she was twenty-three years old. She realized that only she could change her life, and decided to finish her education, despite the hardships that this posed. She had to work hard for success, and therefore, she appreciated her own accomplishments. As she completed each milestone, she would set new goals for herself. She learned that planning was the only way to meet her goals. She says that the most important legacy that her family gave her was the desire to give back to the community that gave to her. She imparts this idea to all those who work for her and to those with whom she comes in contact.

There are several entrepreneurial traits that can be identified in Ms. Archuleta. She is certainly a risk-taker, as can be seen in her willingness to take a chance on starting a business at a time when being a minority and a woman was sometimes considered a threat to the longevity of the business. She is a continuous innovator, who is not afraid of change and realizes the importance of research and development. Her innovation, proactive personality, and flexibility allow her to move quickly when decisions must be made. She has "the spirit of entrepreneurship," in that she is a very independent thinker, a leader, and a motivator. Additionally, she presents a positive public relations image for her company.

4. What future issues or problems might Mevatec face? Why has this small business been able to weather the downturn in our economy, simply by being a consulting service firm?

As with most small businesses, Mevatec must stay focused on the continuing changes in the market and economy today. Small businesses feel change before larger ones. This requires Mevatec to retain a very technically competent staff, and to ensure that they can change strategy quickly.

The most important problem that this company faced in the past was the possibility that they could be too dependent on the government for business. This can still present problems for the future. A small business, like Mevatec, should not "place all of their eggs in one basket"or they risk failure. Mevatec must remain diversified in their business strategies, so that they would not face a downturn financially, as the government continues to downsize. Therefore, it is important to continue to develop a solid customer base in the private sector. It would appear that Mevatec had diversified sufficiently, however, this was not a process that should be stopped. The business and organizational side of Mevatec provides process re-engineering services using engineering techniques and tools, such as activity-based costing and activity-based management, and cost analysis. Various customers should be sought in areas, such as civil engineering, logistics (supply and transportation), personnel, flight operations, finance and accounting, meteorology, health care, information technology, and functions supporting research and development.

Another possible issue would be the future of the company. Should the current CEO decide to retire within the next five to ten years, consideration must be given, as to whether the company would be sold or a possible successor groomed.

Mevatec has been able to weather the recent economic problems, as they provide a needed service to other businesses that are desperate to stay afloat. They provide online and classroom-training courses to teach them how to effectively manage their resources. They also do this on a consulting basis. These options allow companies a range of opportunity, depending upon the need and ability to fund these services. They use these excellent management techniques and are not afraid to change. Change is the key to their success, which is encouraged by Nancy Archuleta. She said, "Limitations are those things not yet conquered" (www.mevatec.com).

EPILOGUE

Mevatec has grown from a company with only four people who were family members to one of the fastest growing small businesses owned by a Hispanic woman. During 2002, revenues were approximately $120 million and the company grew in size to about 500 employees. The price of this growth for the past fifteen years has placed the company in a position that they reached a point where "they were too big to be small and too small to be big," according to the owner and CEO, Nancy Archuleta. She felt that her small business could not compete in this global economy with companies that are so much larger. She said that in some cases, they were competing with companies that were one hundred times larger.

On February 4, 2003, BAE Systems North America announced plans to buy Mevatec for $82 million cash. BAE Systems NA is based in Rockville, Maryland, and is a subsidiary of BAE Systems, which is a publicly traded company in London. They employ about 100,000 people worldwide and have annual sales of $19 billion. The company designs and manufactures military aircraft, submarines, surface ships, radar, avionics, communications, electronics, guided weapon systems and other defense products.

Nancy Archuleta feels that the sale of the company was necessary to keep the business growing. She considered acquisition of other companies, but decided that it would have involved leveraging sales on employee stocks, as Mevatec is employee-owned, and she was not willing to place her employees retirements at risk. In addition, she did not want the risk of an initial public offering.

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