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Editors Inge Nickerson, Barry University Charles Rarick, Purdue University, Calumet

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LETTER FROM THE EDITORS

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

The cases contained in this volume have been double blind refereed, and each was required to have a complete teaching note before consideration. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies. The Instructor's Note for each case in this volume is published in a separate issue of the *JIACS*.

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

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

Inge Nickerson, Barry University Charles Rarick, Purdue University, Calumet

CASES

THE TROPICAL FISH FARM: TRANSITIONING FROM HOBBY TO BUSINESS

Jon G. Fields, University of Wisconsin – La Crosse James E. Finch, University of Wisconsin – La Crosse

CASE DESCRIPTION

The primary purpose of this case concerns the transformation of an interest and skill into a successful entrepreneurial enterprise in a competitive marketplace through effective use of the four Ps of the marketing mix. Secondary issues examined include effective use of essential businessbuilding concepts such as product quality, differentiation, market research on a shoestring, premium pricing strategies, relationship selling, dual channels of distribution, and cost controls. This case has a difficulty level appropriate for college juniors. The case is designed to be taught in one class period and is expected to require two hours of outside preparation by students.

CASE SYNOPSIS

All too many people with particular skills or talents decide to start their own businesses only to fail because they focus on using those skills in their business rather than on building and developing the business itself. This case traces the transition of one person's leisure interest in tropical fish to the development of a successful business in direct competition with large established domestic producers and international importers. Since many students have had aquariums or known friends that have had them, the case is easy for them to relate to on a personal level. As the case unfolds, the hobbyist expands and progresses through a series of expansion phases that soon involves several retail and wholesale buyers. The decision presented to the students is whether to expand into a major player within the region and, if so, which of three expansion alternatives should be pursued.

THE TROPICAL FISH FARM

Diane Henderson enjoyed animals and shared that enjoyment with her family. Two years ago, she purchased a 30 gallon fish aquarium and some young gold fish, bottom feeders, angelfish, and a few others, for her daughter. Several months later, Diane noticed some small, brownish-colored 'bumps' on one of the aquatic plant leaves. When her husband came home they identified

the 200-300 pinhead-sized bumps as fish eggs. Based on their behavior, they determined that the eggs belonged to the angelfish. Within a few hours, however, the eggs were 'gone.'

Diane began doing some research on the Internet to learn how to home-raise baby angelfish. Raising angelfish from babies was not a new idea to her. When she and her husband were attending college, one of their neighbors had a whole bedroom of their apartment filled with dozens of aquariums occupied with breeding pairs of angelfish and babies in various stages of growth. They earned enough profit from the sale of the young fish to local pet stores to pay the rent and utilities for their three bedroom apartment.

Diane read about the ideal water conditions for raising healthy angelfish from egg to fry (young fish). She learned about the types of food they needed during the early days and weeks after hatching, and other fish care information. Soon the pair of angelfish produced another batch of eggs. Since they were no longer competing with other fish, these eggs didn't 'disappear.' The parents swam over the near-vertical stone slate that held the eggs, 'fanning' them every few minutes to keep them clean. They took turns sucking the eggs into their mouths and spitting them back onto the slate. Later, Diane learned that angelfish have special mucus glands inside their mouths that clean and recoat the eggs to protect them from bacteria and fungus. The sticky mucus also allowed the eggs to stick to the slate and not fall to the bottom of the tank and get lost.

After ten day the eggs began to wiggle and the fry were swimming freely three days later. Within six weeks the fish tank was filled with 150 dime-sized and nickel-sized angelfish. During this time the parents had produced two more batches of eggs, but the adults and the baby fish quickly added them to their diets. The fry also began to nibble on their parents' fins. In two more weeks they would be the size of a quarter and would become permanently stunted from over crowding in the tank. The parent fish, not able to escape from their young, would probably not survive.

Diane lived in a town of about 78,000 people that had two independent pet stores plus two large discount department stores that sold tropical fish. She called the owners of the independent stores to see if they would be willing to buy the young angelfish and what they would be willing to pay. They were eager to buy the fish and would pay \$1.50-2.50 each, depending on their sizes. The large discount stores turned her down, indicating that company policy did not permit them to buy fish from local suppliers. A department manager explained that fish purchased from 'hobbyists' are sometimes not raised in well-managed conditions. Fish raised in these conditions are more prone to disease that can spread to the other fish tanks that share a common water circulation system within the store. Infected fish sold to consumers may contaminate home aquariums as well. The risk, liability, and warranty problems associated with buying from small, local producers prompted the discount stores to adopt policies that allowed them to buy fish only from reputable, bonded wholesalers.

Diane asked the owners of the independent pet stores why they would agree to buy from her rather than their established wholesalers. They explained that young fish raised in local water acclimated to local fish tank water better than fish from other locations raised in water with different

characteristics. Since the owners had a hands-on orientation, they could inspect and reject deliveries from local producers if problems were suspected, unlike fish shipped to them in boxes from wholesalers. The store owners also said that local producers, mainly hobbyists, sometimes offered varieties of angelfish that the wholesalers did not carry. She also learned that the vast majority of tropical fish sold throughout the U.S. are raised in open ponds in Florida or imported from Hong Kong. Fish shipped from these distant locations were heavily sedated to relax them and to reduce stress, and routinely spent 72 hours in the shipping bags and boxes. Locally produced fish were in shipping bags for 24 hours or less and required less sedation. This reduced the stress on the fish and resulted in a much higher survival rates within the store and after customers took them home. Diane sold 110 dime-sized fish @ \$1.50 each and 45 nickel-sized fish @ \$2.00 for a total of \$255. The store owner commented on how much he appreciated not having to pay the usual shipping and handling costs that cut into his profits.

Additional conversations with this and other store owners revealed that it was customary for buyers to pay a shipping fee of \$25 to \$30 per box that may contain 25 to 150 fish depending on the species and size. To cover her transportation expenses, Diane began assessing these changes as well. However, to offset this cost, she gave each customer a few 'free' fish (3-5 per box delivered) that the store owner could sell at the full retail price of \$4.50 to \$6.00 each, so they could recoup the delivery cost. The store owners were thrilled with Diane's offer and appreciated her efforts to help them to maximize their profits. They said that no other supplier had ever done that for them! This small gesture that actually cost Diane very little, created a sense of trust, loyalty, and comfort between Diane and her customers. Diane's relationship style of selling, being an effective listener, and responding to what she heard in a meaningful way, was really paying off for both her and her customers. To make sure they never forgot what she was doing for them, on her invoices, she always listed the number and retail value of free fish they received, just below the shipping charge.

The first sale of young fish was none too soon since the adult fish were once again cleaning the slate to prepare it for another batch of eggs. Surprised at the frequency that eggs were being produced, Diane did some additional research. She learned that a healthy pair of angelfish of good stock and under proper conditions could produce 300-800 eggs every 10-15 days, all year round, with only a few 'rest' periods! This volume and frequency of production could only be achieved if the slates on which the eggs were laid were removed and placed into special hatching tanks. These tanks contained mild chemical solutions that protected the eggs from bacteria, and special air bubble systems that substituted for the parents' fanning of the eggs. If the eggs were not removed from the parents' tanks, the parents may not produce another successful batch for forty days or more, and there was a risk that the parents would eat their own eggs or fry before they were ready for sale.

As the months went by, other pairs of angelfish began laying eggs and additional aquariums were added to accommodate them and baby fish in various stages of growth. These tanks were not purchased with money, but were 'bartered' with the local pet stores. The store owners agreed to barter them at their wholesale purchase price so Diane would be able to increase her production for

them more quickly. In exchange for each \$60 worth of fish she delivered, Diane would receive an aquarium with a retail value of \$100. Diane's actual cost for the bartered fish was about \$42 and the retailer could sell the fish for \$200.

Having completed her undergraduate business degree one year earlier, Diane began to wonder if her hobby could be expanded to produce a small but consistent profit. Considering her current level of production, one option was to service only independent pet stores within the surrounding area. This would require deliveries to multiple locations, relatively small orders of two to four dozen fish per order, but a higher price per fish than selling to fish wholesalers. Another option would be to expand and serve both the local stores and wholesalers. Diane knew that wholesalers would buy larger quantities of fish, but she also knew that they would pay a lower price per fish. For the time being, providing wholesalers with sufficient numbers didn't seem to be a realistic option.

Diane began to contact pet stores in the surrounding cities and towns. Sometimes she would call ahead for appointments, and sometimes she would stop in unannounced. Either way, she arrived with a shipping bag containing two dozen, nickel-sized or quarter-sized angelfish and offered them to the owners as free samples of her product. The quality of the fish was evaluated and discussions quickly convinced them that Diane was more than an on-again, off-again hobbyist with questionable quality and reliability. Soon the total demand for her fish was much greater than she could provide.

Diane contacted inter-city delivery companies to determine whether they could pick up her fish at her location and deliver them to her customers. Some did not have licenses to carry livestock, and those that did, could not guarantee that the oxygen-enriched bagged and boxed fish could be processed through the system and delivered before oxygen would be depleted. They also could not provide the appropriate temperature controls during the extreme summer and winter seasons. Not wanting to take these risks and disappointing her customers, Diane continued to deliver fish to each store. She used these visits to learn more about the tropical fish business and angelfish in particular. She gained insights that solved some problems and avoided others. The scattered locations of the pet stores, however, and the relatively small quantities per order, resulted in high delivery costs that cut deeply into the potential profit. Her profit was only about \$300 per month. Diane needed to find a way to increase her production and to decrease her delivery expenses. She decided to do more reading to become more familiar with the industry and to get more ideas.

Diane's research revealed that tens of millions of saltwater and fresh water tropical fish were sold in the United States each year to household, corporate offices, waiting rooms, zoos, and aquariums. Of the 113 million households in the U.S., 63%, or 71 million households had pets. Fourteen million households had 142 million freshwater fish. Through research and conversations with her retail customers, Diane learned that the large producers used a dual distribution system. The bulk of the producers' fish were sold and flown to wholesalers across the country. Plastic shipping bags were filled 1/3 with water and 2/3 pure oxygen and a sedative to relax the fish. The wholesalers took fish out of the shipping bags and placed them into holding tanks. When retailers

ordered fish from the wholesalers, the fish were subjected to the bagging procedure a second time and then drop shipped at the retailers' locations. Large retailers near major airports, however, purchased fish directly from the producers and sent their employees to pick them up at the airports.

Diane wanted to be a part of that larger industry. She knew that to succeed in the competitive, commodity-oriented marketplace, she needed to produce a product that was better and different than the established suppliers. To make sure that her fish had good genetics and physical characteristics, Diane purchased young breeding stock from a reputable and nationally known supplier in New York State. The cost for the twenty young, high quality fish ranged between \$20 and \$30 each for a total cost of \$500. The new stock consisted of a variety of angelfish including black and yellow marble, gold standard, gold pearl scale, silver, zebra, blue blushing, koi-colored (orange, black & white) and others. These varieties also featured standard fins, lace fins, veil, and super veil fins. The special color and fin varieties were not offered by the large producers because they were too difficult to raise and did not tolerate the shipping processes well. It would be another six months, however, before the young fish would reach maturity, pair off, and began to lay eggs.

After six months, their daughter's bedroom could no longer accommodate all of the aquariums, and they began to take up space in the living room, dining room, and hallways. Later, the operation was shifted to the basement ... first in one room, then a second, a third, and eventually a fourth room. Diane's hobby began to produce enough revenue to pay for the investment in food, equipment, utilities, and delivery expenses, and have some profit left over. Besides that, the activity was just plain fun. Like any livestock, however, the daily attention required did not allow for a 'day off.'

Diane located a tropical fish wholesaler in a city approximately 200 miles to the south, and two more in a city 250 miles to the east, each of which served multiple, and sometimes overlapping, markets. She contacted the closest of the three wholesalers and set up an appointment. She prepared for the sales call by looking at the wholesaler's website and the websites of several other fish wholesalers. She also took pictures of the special varieties of the breeding stock that she was raising. On the day of the appointment she bagged an assortment of her young fish and presented them to the owners as a free sample. She also offered copies of the invoices from the breeding stock supplier in New York to support her claim of quality genetics.

The wholesaler said that he had done business with 'hobbyists' in the past but had been frustrated by inconsistent quality and quantities. Diane's invoices for the breeding stock eased the wholesaler's concern about quality, and her business expansion plans convinced him that she wasn't the typical hobbyist. He decided to give Diane a chance to prove herself and with some residual reluctance, agreed to purchase 200 dime and nickel-sized angelfish at 35ϕ each when they became available – the price he paid for angelfish purchased from his suppliers in Florida and Hong Kong. Since retailers paid a much higher price per fish than the wholesaler's location. She sold only

her 'excess' fish to the wholesaler. She began this 'route' two weeks later. All of her customers paid her invoice upon delivery.

The day after making her delivery Diane followed up and called each customer to ask about the fish they had received. The wholesaler indicated that he was surprised that not a single fish had died. The wholesaler's comment surprised her so she asked more about it. He informed her that fish from the Florida and Hong Kong breeders were a highly perishable product. Fish from those suppliers were shipped by air, were heavily sedated, and routinely had a 25% mortality rate upon delivery. More of these fish died after being placed into the holding tanks, and even more died after being sold to retail customers. She also learned that during the extreme times of the year, winter and summer, that it was not uncommon to have 80% mortality rates in some bags of fish! The counting of dead fish being bought and sold and processing and tracking the credits was a time consuming, frustrating, and expensive effort. The problems inherent in this production and distribution system also produced frequent complaints from the wholesaler's retail customers and reduced their satisfaction and loyalty. The low, 35ϕ price charged by the producers and the high markup to \$1.50 to \$2.75 per fish to the retailers helped to off-set some of the wholesaler's cost and inconvenience.

Initially, Diane's deliveries to the wholesaler were every three weeks ... first 200, then 400, then 500 fish per order. The wholesaler was delighted with the consistent quality of the fish. A bonus was that Diane sorted and bagged the fish by color, size, and fin type. This allowed him to offer, fill, and price specific orders from retailers rather than, receiving and selling 'mixed assortments' as he had done in the past. And the mortality rate, if it wasn't zero, was at most only one or two fish per shipment – the lowest mortality rate from any supplier from whom he purchased. This eliminated the need to count dead fish and the tracking and processing of credits. The increased quality and the variety of angelfish that he now offered to his retail customers also increased their level of satisfaction and loyalty.

Finally convinced that Diane was a serious and reliable supplier, he offered to buy 100% of her angelfish up to 2,000 per week during the off season (summer) and up to 3,000 per week the rest of the year. But Diane believed that the quality and variety of her fish justified higher prices than those purchased from the Florida and Hong Kong suppliers. As part of her negotiation strategy, Diane prepared a profit comparison sheet that showed that the wholesaler could actually make more profit even when paying her a higher price for high-quality fish (see Table 1). The wholesaler accepted her explanation and agreed to pay \$.75 for dime and nickel-sized fish and \$1.25 for quarter sized fish. He would also pay an additional 25¢ for the specialty angelfish - those that had veil or super veil fins and the pearl scale, koi-colored, and blushing varieties. This pricing agreement effectively raised Diane's price per fish by more than 200%. But the quantity of 3,000 fish per week was more than ten times that of her current production.

Only ten months had passed since Diane made her first sale. Soon the young breeding stock would be mature enough to pair off and would need separate, 15-20 gallon tanks to begin producing eggs. As luck would have it, the owner of one of the local pet stores experienced an emergency that

required her to liquidate her business. Among the items being auctioned off were thirty-six 24gallon fish tanks and four 55 gallon tanks, the shelf racks that stacked the tanks 3-high, as well as the water pumps, heaters, filters, and related equipment. Diane was able to buy approximately 4,000 (new cost value) of equipment for only 800. She and her husband dismantled the equipment, took it home, sterilized the tanks, and set them up in the basement of their house. Very soon, the tanks were all filled with breeding pairs or young fish in various stages of growth. Production soon increased to 500 salable-sized fish per week, and the 20 breeding pairs were producing more eggs and fry than the 1,200 gallons of fish tanks could accommodate. If the tanks were cleaned each day and with sufficient water exchanges, each gallon of water could support 10 – 12 quarter-sized fish.

Diane needed to obtain more fish tanks to grow out the fry, but she was reluctant to investment in new equipment. Now that her retail customers were receiving adequate quantities of fish, they were not eager to barter the additional tanks, and Diane didn't want to press the issue. During one of her deliveries she shared her dilemma with her wholesaler customer. Eager to help to her expand, he offered to barter some tanks that he had left over from when he owned a retail store. Diane gained three 75 gallon tanks and one 125 gallon tank with a combined retail value of \$2,000 for a trade out of only 1,000 quarter-sized fish of various types and sizes. Within days, the new tanks were in place, over crowded tanks were thinned out, and they were alive with hundreds of young fish. But the breeding pairs, now numbering thirty, were producing more eggs and young fish than the grow-out tanks could accommodate, and Diane was still producing fewer fish than the total of her customers were requesting. If she could deliver more fish each time she completed her 400 mile round trip delivery route, her efficiency and profits would increase dramatically. She had to find a way to expand her production without investing in new, expensive equipment, but how?

One day when she was making a delivery to a retail customer, Diane told the owner of her dilemma. He told her that, before he purchased the pet store, he raised tropical fish for sale, but used plastic, acid-free storage containers purchased from local hardware stores as growing tanks. By putting one container inside another, the 40 gallon containers could be filled with 32 gallons of water without bursting. The cost for the double-tanks was only \$16 compared to the \$125 retail price for similar-sized glass tanks. The cost for the heaters, filters, and overflow adaptors remained constant at \$22 per tank. Within weeks, 28 of the plastic tanks were set up and fully operational. There was no more room for additional tanks now that every room in the basement was full. She now had more than 2,200 gallons of fish tanks in the system and production was soon up to its maximum capacity of 2,000 fish per week. Approximately 75% of these were the common varieties and 25% were the special varieties. After deducting transportation costs, utility costs, fish food, and other supplies, Diane was making a profit of \$2,000 per month from her home-based business that had started out as a hobby. She was happy and so were her customers, and she was successfully competing with established competitors from Florida and Hong Kong.

Last month Diane's wholesaler informed her that he was purchasing one of the two wholesale companies located in the city 250 miles to the east of Diane's location. That business was larger than his existing business. The two businesses combined would give the wholesaler a non-exclusive distribution area of 20 states and included independent pet stores, retail department store chains, and the nation's largest pet store chain. He asked Diane if she could increase her production to 8,000 angelfish per week. He even offered to receive all of her fish at his closest facility and to transport those needed at the other location with his own vehicles that were traveling back and forth between the two. Conversations included the possibility of breeding and producing other varieties of tropical fish if Diane would be willing to expand to accommodate his needs. Since the basement of her house was filled to capacity, the only way she could expand further would be to move into a separate building. The new and larger setup would require more sophisticated and automated equipment. It would also require the rent or purchase of a building and hiring full-time employees.

Diane also considered less conventional alternatives to meet her expansion needs. The recent consolidation of farms within the dairy industry had produced a surplus of used stainless steel milk tanks used to cool and store raw milk on the farms before it was picked up by bulk transport trucks. Tanks ranged in size from 500 to 800 gallons each and were accumulating around area farm supply businesses. Diane thought these tanks would be ideal for raising young fish to saleable size and considered buying several at a price of 50¢ per gallon capacity. She could set up 8,000 gallons of these tanks in an industrial building six blocks from her home, but there would be no space to expand further. She estimated that she could produce up to 10,000 additional angelfish per week at an average price of \$1 each. The commercial water treatment and circulation systems would cost about \$20,000. The rent would be \$1,500 per month, utility costs were estimated \$500 per month, and she would need to hire two full-time employees. She would also have to buy a larger, temperature-controlled delivery vehicle at a cost of \$35,000. While the facility would be nearby, she would have to travel back and forth between the part of the business that would still be located in her basement and the rented facility.

The changes in the dairy industry had also left many rural cheese factories closed and vacant. Diane located a vacant factory four miles away that still contained the stainless steel cheese vats and plumbing systems. She felt the facilities would be ideal for conversion into a tropical fish breeding and hatching facility, using the cheese vats as indoor 'ponds.' The water treatment, filtering, oxygenating, circulation, and heating systems would require an investment of \$75,000. She would also need to buy the delivery vehicle.

The factory was located in a remote area and was not easily converted into other useable space. To demolish the facility to make way for a new building would be very expensive, and since the location was generally undesirable, the prospects for a new business at that location were minimal. Diane thought she might be able to buy the vacant factory from the large corporation that had purchased and closed it four years earlier, for a fraction of the cost otherwise necessary for her to buy and equip another facility. There would be ample space to move the current setup out of her

basement and into the factory. Diane could produce several varieties of tropical fish and approximately 30,000 fish per week at an average price of 50¢. She would have to hire four full-time employees when the facility reached capacity in about eighteen months. She was temped to offer a low-ball price to buy the factory, but didn't know how much to offer, or what her maximum offer should be. She was uncertain whether or not she wanted to accept the additional risk and responsibility for such an enterprise. To help guide her decisions, Diane prepared Table 2.

In only two years, Diane's not-for-profit hobby had grown into a profitable home-based business with the potential of becoming a player in the tropical fish industry within the region. She now had three choices before her. She could remain at her current size within the confines of her basement, she could rent the building a few blocks away, or she could purchase and move into the cheese factory. At this time, she is considering her options from financial, risk, and lifestyle perspectives.

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Table 1: Wholesaler Fish Mortality/Profit Comparison Sheet

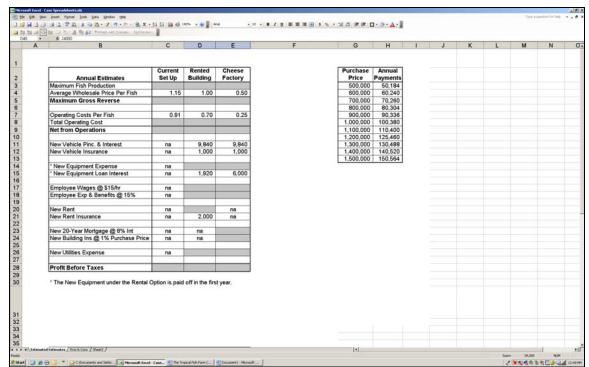
 Table 2: Cheese Factory Purchase Price and Principle & Interest Payment Chart.

 Annual payments are based on a 20-year mortgage at a fixed interest rate of 8%.

A 11	C	D	E	F G	H		ĸ	1	м
				Purchase	Annual Payment	Monthly Payment		Payment #	Pav
Annualized Estimates	Current Set Up Re	nted Building	Cheese Factory	\$500.000		\$4,182			,
Maximum Fish Produced	104.000	624,000	1,560,000	600,000	60,240	5.020	50,184.00	240	1 1
Average Price Per Fish	\$1.15	\$1.00	\$0.50	700.000	70.260	5.855		239	
Maximum Gross Revenue	\$119,600	\$624,000	\$780,000	800,000	80,304	6,692		238	
				900,000	90,336	7,528		237	
Operating Costs Per Fish	\$0.91	\$0.70	\$0.25	1,000,000	100,380	8,365		236	
Total Operating Cost	\$94,640	\$436,800	\$390,000	1,100,000	110,400	9,200		235	
Net From Operations	\$24,960	\$187,200	\$390,000	1,200,000	125,460	10,455		234	
				1,300,000	130,488	10,874		233	
New Vehicle Princ & Interest	na	9,840	9,840	1,400,000	140,520	11,710		232	
New Vehicle Insurance	na	1,000	1,000	1,500,000	150,564	12,547		231	
								230	
*New Equipment Expense Per Year	na	24,000	15,000					229	
*New Equipment Loan Interest @ 8%	na	1.920	6.000					228	
								227	
Employee Wages @ \$15/hr	na	62,400	124,800					226	
Employee Exp & Benefits @ 15%	na	9,360	18,720					225	
								224	
New Rent	na	18,000	na					223	
New Rent Insurance	na	2,000	na					222	
								221	
20 Year Mortgage w/ 8% Interest	na	na	110,400					220	
New Building Ins @ 1% Purchase Price	na	na	11,000					219	

QUESTIONS:

- I. What did Diane do well as she transformed her hobby into a business? Comment on her research and each of the 4 Ps of the marketing mix.
- II. What were Diane's most important guiding principles that ensured her early success?
- III. Which of the marketing concepts and guiding principles identified in questions #1 and #2 are universal to all other types of products, services, and businesses?
- IV. Complete the shaded portions of the spreadsheet below. Should Diane make an offer to purchase the cheese factory? If so, what should she offer, and what should be her maximum offer? Justify your answers.



V. a) List the pros and cons of each of the three expansion options Diane is facing (no expansion, rental option, purchase option). Consider such things and profit potential, risk, and lifestyle. b) Considering the pros and cons you've identified, choose and defend the *one* option you would recommend.

11

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	Current Set Up	
Pros	Cons	
	Rented Building	
Pros	Cons	
	Cheese Factory	
Pros	Cons	

12

PROJECT MANAGEMENT: USING EARNED VALUE ANALYSIS (EVA) TO MONITOR A PROJECT'S PROGRESS

Sharad Maheshwari, Hampton University Sid Howard Credle, Hampton University

CASE DESCRIPTION

This case illustrates one of several important project monitoring and controlling techniques available for project manager use in construction and other related fields. The case highlights that the lack of proper project monitoring could lead to cost and schedule run-ups that eventually could result in complete failure of a project and financial loss. The case illustrates how a project manager could use variance analysis as an effective tool for project monitoring and controlling. The problem presented originated from a real-life situation of an actual federal building contractor. In this particular scenario, the contractor had incurred losses as a result of project delays due to multiple business factors. The issue became problematic since the responsible project manager lacked knowledge of sophisticated project control and monitoring tools, and relied primarily on his memory and intuition-based physical assessments of activities. The case is an attempt to show that if an appropriate project monitoring technique, earned value analysis (EVA), had been used, this contractor potentially could have avoided losses or even made some profit. This case is appropriate for senior or graduate level courses in project management or operations management. The case will require an estimated 2-3 hours of classroom lecture time. Students might have to spend 4-6 hours of time depending upon their prior experience and knowledge of the project management environment.

CASE SYNOPSIS

A small federal government contractor, Environmental Services, is located in the Virginia Beach area of Virginia. It has incurred losses on some of its projects due to poor cost controls and schedule overruns. The company executes 10 to 30 small to medium-size projects at any given point of time. The company is growing and wishes to find a way to cut its losses due to cost and/or schedule overruns. These overruns occur due to several internal and external factors. The internal factors include the loss of key personnel, improper supervision, the lack of technical skills, poor understanding of the scope of projects, etc. External factors such as vendor delays, quality of supplies, unclear designs, weather and similar factors may also cause a project activity to miss an

established deadline or to cost more than the estimated budget. The company largely relies on the experience of the project managers to make a decision based on their assessment whenever a problem arises. Currently, there is no system in the company to keep track of the impact of cost and schedule overruns on a given project. The company recognizes profit or loss once projects are completed and final performance analysis is performed.

The company gave the task of establishing procedures and developing an ongoing monitor/control system to an outside consultant. The consultant reviewed several old projects and presented an analysis to the company. It was suggested that the company establish a proper mechanism for recording cost and budget details during the life of each project. Furthermore, it was suggested that the company use an Earned Value Analysis (EVA) tool to monitor the cost and schedule overruns and adjust project tasks, schedules and resources accordingly.

BACKGROUND INFORMATION

Environmental Services is a general contracting company based in Virginia Beach, Virginia. The company performs general contracting work mainly in the area of construction and facility maintenance. The company executes approximately 10-30 projects at any given time and each project is managed by a project manager (PM). Most federal government contracts are awarded to the company on a fixed cost basis. Also, most Environmental Services' projects are awarded on a "design-bid-build" basis. That is, the company bids on the projects after the design has been completed by the federal government or other governmental agency. Environmental Services is not involved either directly or indirectly in any design aspects of the project.

The general contracting organizations like Environmental Services that work on fixed cost "design-bid-build" projects can only be profitable by completing projects on time and within budget. However, in construction projects, cost and/or schedule overruns could occur due to a variety of internal and/or external factors. These overruns can quickly wipe out profit margins and may result in a loss. Project losses generally are the result of problems of a few activities in a project which may impact other activities and hence, the entire project may be impacted negatively. It is not possible to avoid all schedule or cost overruns (such as those due to inclement weather), but proper project monitoring can reduce the impact of these overruns.

ANALYSIS OF PROJECT MANAGEMENT PROBLEMS

There are two main categories of factors that can create risk in a construction project during its monitoring and controlling phase. These categories are internal and external factors. Internal factors include scheduling conflicts, lack of subcontractor supervision, insufficient labor and/or supervisor training, improper match between labor skills and the tasks assigned, and changes in key personnel. It is important that the project management recognizes a problem and takes corrective

action in a timely manner. For example, scheduling conflicts could be resolved by rescheduling (if time permits), supporting an activity with additional labor, or resource leveling. The lack of subcontractor supervision or improper supervision could be resolved with the proper training of management or by providing support to the subcontractor as needed. Similarly, when there is a change in the key personnel, management needs to find an effective replacement quickly. Tools like EVA provide necessary information to management regarding the project status while requiring proper documentation of project parameters at select time intervals or other milestones. These tools and techniques (like EVA) are used at the monitoring and controlling stage of a project life cycle, hence, should not to be confused with project scheduling techniques like PERT, CPM, etc. which are used at the planning stages of a project life cycle.

External factors could be more serious since contractors have little or no control over these factors. Problems may arise due to delay by an external organization or due to natural causes like rain, snow, wind, etc. External organizations may include subcontractors, suppliers, and project owners. Subcontractors' internal problems can have a direct impact on a project. For example, labor disputes at a subcontractor's business may force a company to miss completion dates, potentially delaying a project. Suppliers could have similar problems as subcontractors. Delays in material supply can also cause significant cost and schedule overruns. Project managers should have the ability to spot these problems early and to take corrective action. Providing extra labor or financing to fix the subcontractor problem could avoid bigger delays and losses to the entire project. Furthermore, project owners can also increase general risk by changing task requirements (scope creep). The change in one task could result in a much larger cumulative impact of the project cost and time. These changes should be carefully evaluated and budgeted. A proper application of EVA could also be very helpful in determining the expected variances caused by additional requirements, the correction of design flaws, or misinterpretation of the requirements; thus the contractor can have better estimates for negotiating additional terms and budgets.

Natural causes like excessive rain, snow, extreme temperatures, severe storms, etc. can also cause large delays in projects, as well as increase project costs. These are uncontrollable events; nevertheless these events require a contractor's response. Again, EVA can help management in determining the cost and schedule variances as the result of natural events. Consequently, management can take proper remedial action to reduce the impact of the delay caused by natural events.

FACTORS TO CONSIDER IN EVA

An application of EVA assumes that a detailed project plan has been created. In fact, most project grantors will require some kind of project plan to be submitted as a part of the bid approval process. Additionally, EVA will also require detailed cost estimates, methods of assessment of

completion of a part or full activity, and time interval for assessment of activities. The following table (Table 1) shows a list of necessary items and processes for the proper application of EVA.

	Table 1: Necessary Steps in EVA Application							
Step #	Description							
1.	Develop a Work Breakdown Structure (WBS) where major tasks are broken down into their detailed tasks levels. For most government agencies, a federal contractor must submit a WBS to bid for a job.							
2.	Estimate the cost of each task involved, including direct cost; indirect cost that includes general and administrative overhead and marketing; contingency cost; and residuals like profit.							
3.	Create a schedule of implementation with the critical path clearly identified. For a larger project there might be more than one schedule, one for each major task in the WBS.							
4.	Determine how often monitoring information should be compiled and/or milestones for monitoring the project. Short time period estimates of work completed (cost and time) may waste managerial time and allow little time to assess the effectiveness of a corrective action. Very long time between estimations may not allow enough time to take corrective action.							
5.	Calculate the variances for EVA to obtain measures like the Cost Schedule Index (CSI), the Schedule Performance Index (SPI), and the Cost Performance Index (CPI), etc. These measures allow you to tell how well the project is progressing and how close it is following schedule and budgeted costs. These indexes would also help to prioritize where corrective action is critical.							
6.	Take corrective action wherever management thinks it is necessary.							

TECHNIQUES FOR PERFORMANCE ESTIMATION

It is not difficult to estimate the cost or time associated with a task during construction operations but the process of estimating cost and time continuously can be time consuming. However, there are several methods that allow quick practical estimations, such as the milestone method, percent complete, 50/50%, or 0/100%, etc. This company uses the percentage of completion method as it is required by some of the government agencies for which Environmental Services has the construction contacts. In the percentage of completion method, at a given interval the project manager estimates each ongoing task and estimates how much or what percentage of the work has been completed. The project manager will record the percentage of work completed as well as dollar amount spent on any ongoing activity. A few tasks may require additional management time to determine what percentage of the task is completed. Cost and time variances are calculated based on actual percentage completed.

APPLYING EVA TO MONITORING A PROJECT

The project in this case involved a federal government contract to build a special ceremony center on a military base. This was one of many independent projects Environmental Services was handling at that time. The project manager for this project was Mr. Krish Patel. This project exceeded time budgeted, and the company ended up incurring substantial losses on the project. The estimated losses were approximately 5% of overall budget. The losses were higher due to the time sensitive nature of the project. The consultants analyzed the project and showed that if EVA had been used the company could have cut its losses substantially or remained profitable on the project. The specifications of the project's ceremony center were prepared by the design team that was independently hired by the military. The total project time was seven months (November 1 to May 31). However, to facilitate an on-time start of the contract, the award was made two months in advance to account for the lead time of delivery of construction supplies. Any delay to the project would be subject to penalty due to a pre-specified contract clause. Therefore, careful planning by the management was important for the on-time delivery of this project. Tables 2 and 3 provide the estimated timeline and budget for six major construction tasks. For simplicity, other project activity constraints are ignored, including any activity-dependent requirements.

Table 2: Percentage of Tasks to be Completed Each Month											
Task	Months	Percentage Completion by Month									
		Nov	Dec	Jan	Feb	Mar	Apr	May			
Business Overheads (A)	7	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%			
Site Development (B)	3.5	40%	30%	20%	10%	-	-	-			
Concrete Work (C)	2.6	10%	40%	50%	-	-	-	-			
Framing/Steel Work (D)	2.75	30%	-	50%	20%	-	-	-			
Wood/Roof (E)	3.5	20%	20%		45%	15%	-	-			
Interior/Elec/Plumb (F)	5.5	-	10%	15%	20%	20%	25%	10%			

	Table 3: Budgeted Cost												
Tasks	Budgeted Cost Of Work Scheduled		Months										
		Nov Dec Jan Feb Mar Apr M											
А	\$250,000	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714					
В	\$450,000	\$180,000	\$135,000	\$90,000	\$45,000	\$0	\$0	\$0					
С	\$155,000	\$15,500	\$62,000	\$77,500	\$0	\$0	\$0	\$0					
D	\$95,000	\$28,500	\$0	\$47,500	\$19,000	\$0	\$0	\$0					
Е	\$175,000	\$35,000	\$35,000	\$0	\$78,750	\$26,250	\$0	\$0					
F	\$300,000	\$0	\$30,000	\$45,000	\$60,000	\$60,000	\$75,000	\$30,000					
Totals	\$1,425,000	\$294,714	\$297,714	\$295,714	\$238,464	\$121,964	\$110,714	\$65,714					

PROBLEMS

At the end of September, prior to starting the project, a severe thunderstorm disrupted the construction site. More than two weeks of work time was lost due to the flooding of the site. This loss of time could not be made up by an extension of the project time. The building had a major event scheduled at the end of construction.

By the end of December, another problem surfaced related to the quality of work performed by a subcontractor. The wood/roof subcontractor failed to meet the standards set in the military contract. About 50% of the work completed in December by this subcontractor had to be redone.

In January, Mr. Patel realized that the subcontractor for interior work was having problems in procuring cabinets and other specialty items. A meeting with the subcontractor revealed that the company was having problems with labor and finances. Mr. Patel did not take action in December, as this was an outside contractor and Krish Patel was not yet sure of the problem. Furthermore, the subcontractor indicated that the problem would be resolved in the near future. At this time, hiring a new contractor was not an option.

CASE DISCUSSION QUESTIONS

If you were an assistant to project manager, Mr. Krish Patel, how would you help Mr. Patel in monitoring the project using EVA? Data regarding the variance for November, December, and January are provided below in Tables 4-9.

	Table 4: Task Variance Analysis Progress Report (November)										
Tas	sk	Months									
		Nov	Dec	Jan	Feb	Mar	Apr	May			
А	Planned	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%			
A	Actual	14.3%									
	Planned	40%	30%	20%	20%	10%	-	-			
В	Actual	20%									
C	Planned	10%	40%	50%	-	-	-	-			
С	Actual	10%									
D	Planned	30%	-	50%	20%	-	-	-			
D	Actual	30%									
F	Planned	20%	20%		45%	15%	-	-			
Е	Actual	20%									
F	Planned	-	10%	15%	20%	20%	25%	10%			
F	Actual	-									

	Table 5: Cost Variance Analysis Progress Report (November)										
	Tasks				Months				LRE		
		Nov	Dec	Jan	Feb	Mar	Apr	May			
	BCWS	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$250,000		
A	ACWP	\$35,714									
В	BCWS	\$180,000	\$135,000	\$90,000	\$90,000	\$45,000	\$ -	\$ -	\$460,000		
в	ACWP	\$100,000									
C	BCWS	\$15,500	\$62,000	\$77,500	\$ -	\$ -	\$ -	\$ -	\$157,000		
C	ACWP	\$17,500									
D	BCWS	\$28,500	\$ -	\$47,500	\$19,000	\$ -	\$ -	\$ -	\$95,000		
D	ACWP	\$28,500									
Е	BCWS	\$35,000	\$35,000	\$17,500	\$78,750	\$26,250	\$ -	\$ -	\$192,500		
Е	ACWP	\$35,000									
F	BCWS	\$ -	\$30,000	\$45,000	\$60,000	\$60,000	\$75,000	\$30,000	\$300,000		
Г	ACWP	\$ -									
Total \$1,454											
BCW revise	S: Budgeted of ed-budget estim	cost for work aates	scheduled, or	scheduled wo	ork (SW); AC	WP: Actual	cost of work	performed 1	LRE:Latest		

	Table 6: Task Variance Analysis Progress Report (December)											
Tas	sk	Months										
		Nov	Dec	Jan	Feb	Mar	Apr	May				
	Planned	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%				
А	Actual	14.3%	14.3%									
	Planned	40%	30%	20%	20%	10%	-	-				
В	Actual	20%	30%									
0	Planned	10%	40%	50%	-	-	-	-				
С	Actual	10%	40%									
D	Planned	30%	-	50%	20%	-	-	-				
D	Actual	30%	-									
F	Planned	20%	20%	10%	45%	15%	-	-				
Е	Actual	20%	10%									
P	Planned	-	10%	20%	20%	20%	25%	10%				
F	Actual	-	5%									

	Table 7: Cost Variance Analysis Progress Report (December)									
,	Tasks	Months								
		Nov	Dec	Jan	Feb	Mar	Apr	May		
	BCWS	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$250,000	
А	ACWP	\$35,714	\$35,714							
	BCWS	\$180,000	\$135,000	\$90,000	\$90,000	\$45,000	\$ -	\$ -	\$460,000	
В	ACWP	\$100,000	\$135,000							
	BCWS	\$15,500	\$62,000	\$77,500	\$ -	\$ -	\$ -	\$ -	\$157,000	
С	ACWP	\$17,500	\$62,000							
	BCWS	\$28,500	\$ -	\$47,500	\$19,000	\$ -	\$ -	\$ -	\$95,000	
D	ACWP	\$28,500	\$ -							
	BCWS	\$35,000	\$35,000	\$17,500	\$78,750	\$26,250	\$ -	\$ -	\$192,500	
Е	ACWP	\$35,000	\$35,000							
	BCWS	\$ -	\$30,000	\$60,000	\$60,000	\$60,000	\$75,000	\$30,000	\$300,000	
F	ACWP	\$ -	\$15,000							
Total								\$1,454,500		

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Table 8: Task Variance Analysis Progress Report (January)											
- -	Task		Months								
		Nov	Dec	Jan	Feb	Mar	Apr	May			
А	Planned	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%			
	Actual	14.3%	14.3%	14.3%							
D	Planned	40%	30%	20%	20%	10%	-	-			
В	Actual	20%	30%	20%							
C	Planned	10%	40%	50%	-	-	-	-			
C	Actual	10%	40%	50%							
D	Planned	30%	-	50%	20%	-	-	-			
D	Actual	30%	-	50%							
Г	Planned	20%	20%	10%	45%	15%	-	-			
Е	Actual	20%	10%	10%							
Г	Planned	-	10%	20%	20%	20%	30%	15%			
F	Actual	-	5%	10%							

	Table 9: Cost Variance Analysis Progress Report (January)									
Tasks		Months								
		Nov	Dec	Jan	Feb	Mar	Apr	May		
	BCWS	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$35,714	\$250,000	
А	ACWP	\$35,714	\$35,714							
	BCWS	\$180,000	\$135,000	\$90,000	\$90,000	\$45,000	\$ -	\$ -	\$460,000	
В	ACWP	\$100,000	\$135,000							
	BCWS	\$15,500	\$62,000	\$77,500	\$ -	\$ -	\$ -	\$ -	\$157,000	
С	ACWP	\$17,500	\$62,000							
	BCWS	\$28,500	\$ -	\$47,500	\$19,000	\$ -	\$ -	\$ -	\$95,000	
D	ACWP	\$28,500	\$ -							
	BCWS	\$35,000	\$35,000	\$17,500	\$78,750	\$26,250	\$ -	\$ -	\$192,500	
Е	ACWP	\$35,000	\$35,000							
	BCWS	\$ -	\$30,000	\$60,000	\$60,000	\$60,000	\$75,000	\$30,000	\$300,000	
F	ACWP	\$ -	\$15,000							
Total								\$1,454,500		

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THIEL MACHINERY: THE CASE OF THE DISAPPEARING LIFO

Kurt R. Jesswein, Sam Houston State University

CASE DESCRIPTION

This case requires the student to examine how a significant change in accounting principle will likely affect the financial condition and future funding situation of Thiel Machinery. Specifically, the student will examine how the probable abolition of the LIFO inventory costing method (as the U.S. moves towards acceptance of the International Financial Reporting Standard) will affect various financial ratios of the company, most notably the Altman Z-score. The student must make pro forma adjustments to the company's existing financial statements that account for the elimination of LIFO and calculate the expected change in the Z-score. Because the company is equity using a free cash flow valuation model and examine how reduced cash flows from higher tax payments affect not only financial ratio calculations but potentially the value of the company itself.

CASE SYNOPSIS

Thiel Machinery, a successfully growing machinery company, is grappling with the potential impact of losing the ability of using LIFO inventory costing methods on its current and future funding sources. The student is placed in the role of a recently-hired assistant to the president and founder of the company. The student is charged with providing an analysis and summary report of the likely implications for the company's current financing situation and its upcoming stock issue.

THIEL MACHINERY

Despite the recent economic downturn, Thiel Machinery has continued to be a turn-of-thecentury bright spot in the economy. From humble beginnings only a short ten years ago, the company has seen continual growth. John Minnie, the founder and president, is excited about how far he has come and is looking forward to expand his operations in the near future.

The company to date has been extremely profitable. Despite the company's successes, John has found it necessary to borrow a significant amount of long-term and short-term funds from his local bank, First Security, to meet his growing financing needs.

First Security has been an avid provider of funds given the long-term relationship that John Minnie and his family has had with the bank over many decades, and because of the growth potential of the company itself. For example, Thiel Machinery has consistently and easily met all of the loan covenants that First Security has had in place.

However, John's vision is even greater. Although he is appreciative of the financing he has received in the past from First Security, he does not believe the bank can provide the extensive amount of financing that he believes will be necessary to expand the company's operations and meet the growing demand for his high quality and high value product line. So besides maintaining the relationship with First Security, John is also examining the possibility of going public and issuing common stock to fund his expansion plans.

	2008	2007		2008	2007
Cash	\$ 7.7	\$ 6.9	Short-term debt	\$ 6.5	\$ 5.7
Receivables	³ 25.1	23.8		45.6	40.3
			Accounts payable		
Inventory	116.8	103.9	Other current liabilities	<u>22.5</u>	18.2
Other current assets	<u>11.5</u>	<u>9.6</u>	Total current liabilities	74.6	64.2
Total current assets	161.1	144.2	Long-term debt	118.6	112.3
Fixed assets, net	218.5	188.2	Other long-term liabilities	51.3	38.8
Intangibles & other assets	21.0	19.5	Total liabilities	244.5	215.3
Total assets	\$ <u>400.6</u>	\$ <u>351.9</u>	Equity	31.0	31.0
			Retained earnings	125.1	105.6
			Total equity	156.1	136.6
Memo: LIFO Reserve	\$42.8	\$34.2	Total liabilities and equity	\$ <u>400.6</u>	\$ <u>351.9</u>
Sales	\$486.4				
Less: Cost of sales	318.4				
Gross profit (loss)	168.0				
Less: Operating expenses	102.4				
Operating profit (loss)	65.6				
Less: Interest expense	<u>35.6</u>				
Earnings before tax	30.0				
Less: Income tax expense	<u>10.5</u>				
Net earnings after tax	\$ <u>19.5</u>				

Exhibit 1 Financial Statements (\$ millions)

Potential Fly in the Ointment

Despite his current successes, John has become aware of a potential problem that might affect both his current financing arrangement and the possibility of raising new funds through the issuance of common stock. John' nephew, Leonard Minnie, has been studying accounting and finance at State University, and has learned that there is a move to shift U.S. Generally Accepted Accounting Principles (GAAP) to the more globally-accepted International Financial Reporting Standards (IFRS).

Among the multitude of potential changes to the company' financial statements that might be expected from a switch to IFRS, the one that John is most concerned about is the abolition of using the LIFO (last-in, first-out) inventory costing system that his company has been using. The use of LIFO is common among small- to medium-sized machinery companies. For example, Leonard Minnie, while working with Compustat data on a research paper at school, discovered that of the 102 companies in the same industry sector as Thiel Machinery, 44 used LIFO inventory valuation. This was an extremely high percentage given that only around 300 of the 8,000 companies in the Compustat database used LIFO.

Wen using LIFO, companies assign the most recent costs of acquiring inventory to the inventory sold during the period, with the remaining older costs assigned to the valution of the remaining unsold inventory. In periods of rising prices this usually has the effect of reducing profits. Thiel Machinery has used LIFO because, among other things, the reduced amount of profits meant the company paid significantly less in taxes, which has allowed it to reinvest a higher proportion of cash back into the business. This tradeoff, reporting lower accounting profits in exchange for paying lower taxes, is due to a tax regulation commonly referred to as the LIFO conformity rule. Unlike other aspects of accounting such as fixed-asset depreciation, the tax code states that companies using LIFO must use it for both financial reporting and tax reporting. This differs, for example, with depreciation, in which many companies employ straight-line depreciation in their financial reporting and hence disclose higher profit margins, but then use accelerated depreciation for tax reporting and hence pay lower amounts of tax.

If the switch to IFRS caused LIFO to be abolished, Thiel Machinery could potentially face a variety of distinct yet interrelated problems. First, the company is required by First Security to maintain adequate financial ratios, most notably an Altman Z-score of greater than 3.0, and the loss of LIFO might negatively affect the calculation of this measure. Second, the company would be required to make tax payments to cover the amounts previously deferred by using LIFO, reducing the amount of free cash available for its operations. Third, the reduction in cash flows from paying more in taxes could potentially reduce the value of the company's equity and the price of any new common stock that the company was considering to issue. This would provide the company with less cash than it had anticipated from the stock issue.

The Altman Z-score is calculated as a weighted sum of five individual ratios: working capital to total assets (X₁); retained earnings to total assets (X₂); EBIT, or earnings before interest and taxes, to total assets (X₃); market value of equity to book value of liabilities (X₄); and sales to total assets (X₅), using the following formula: $Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5$. Z-scores above 3.0 are typically associated with companies that are not expected to suffer significant financial difficulties and bankruptcy and Thiel Machinery has consistently maintained a Z-score above this threshold, per the loan covenant with First Security.

Oe complication with the Z-score calculation for Thiel Machinery is that it is a privately-held company and therefore does not have a readily determinable market price for its common equity.

Because of this, John Minnie, working with his lenders at First Security, has been estimating the market value of its equity using a variation of the free cash flow valuation model. This model first estimates the present value of the company's future expected free cash flows through the use of a constant-growth perpetuity formula. It then subtracts the amounts owed to its debt holders with the remaining amount assumed to be the market value of the equity. To demonstrate, John Minnie estimated that in 2008, Thiel's free cash flows (that is, the amount of cash available for future investments after paying for required investments in fixed assets and working capital) was \$25.0 million. Assuming a constant growth rate of three percent per year, and discounting the future cash flows at ten percent (based on an estimate of the required rate of return of similar publicly-traded companies), the present value of the company's free cash flows was estimated to be \$367.9 million. Note that the constantly-growing perpetuity formula is written as $[(FCF x (1 + g)) \div (r - g)]$ with *FCF* being the free cash flow of \$25.0 million, *g* representing the growth rate of three percent, and *r* representing the discount rate of ten percent. Subtracting te \$125. million of outstanding short-term and long-term debt leaves \$242.8 million as the estimated market value of the company's equity. This amount would then be used to calculate the X_4 variable in the Z-score model.

However, with the probable loss of the use of LIFO, the company' financial statements could be significantly altered, in which case the Z-scre might also change. To estimate the impact on the Z-score, pro forma estimates of the key variables used in the model must be made. Companies using LIFO are required to report an estimate of how much their inventory is undervalued relative to the FIFO (first-in, first-out) method. This figure is known as the LIFO reserve account. The LIFO reserve (Thiel reported a value of \$42.8 million in 2008) would then be added to the inventory value reported on the balance sheet, consequently increasing the value of the company's inventory, total current assets, and total assets.

Te company would similarly need to estimate a liability for the taxes that had been deferred through the use of LIFO but which would now need to be paid. Given the company' current tax rate of 35 percent, this would be approximately \$15 million, although this amount would likely not need to be repaid all at once. For example, the U.S. Treasury Department's 2010 *Green Book* summarizing the current government budget proposals explains that companies like Thiel would be allowed eight years to repay these taxes. Thus, assuming equal amounts paid per year, one-eighth of the tax liability would be considered a current liability with the remaining amount a long-term liability. Lastly, to complete the balance sheet adjustments, the remaining amount of the LIFO reserve not accounted for as tax liabilities would be considered net after-tax profits with that amount added to retained earnings.

Besides the balance sheet adjustments, it would be necessary to make adjustments t the company' income statement. For example, increases in the LIFO reserve account during a reporting period can be interpreted as the amount by which the company's cost of goods sold was overstated, and consequently the operating profits were understated, during the period. Hence, the operating profits (earnings before interest and taxes, or EBIT) for the period would need to be adjusted upward

by the growth in the LIFO reserve for the year (or adjusted downward by any reduction in the LIFO reserve). Adjusting for the change in LIFO reserve would also affect the reported net profits and associated increase in retained earnings after reducing the amount of change by the change in taxes to be paid on the increase (at a 35 percent tax rate in this situation). Thiel Machinery reported that its LIFO reserve was valued at \$42.8 million at the end of 2008, up from \$34.2 million the year before. Consequently, the cost of goods sold for the company would need to be adjusted downward, and the EBIT upward by \$8.6 million. In addition, the net income for the company would be adjusted upward by approximately \$5.6 million after accounting for the tax rate of 35 percent.

Your task

You have recently been hired by John Minnie to help him assess the financial implications of having to abandon his use of LIFO. He has asked you for a review of his Altman z-score calculation. This assessment should first be based on the company' current financial statement data, including the assumptions necessary for estimating the value of the company' equity. The financial statements wuld then need to be adjusted to reflect the pro forma situation of not having LIFO available (that is, incorporating the value of the LIFO reserve and the change in the value during the most recent period) with the Altman Z-score recalculated to reflect those adjustments. Note that because of the increased amount of taxes to be paid, the company' free cash flows would fall by an amount equal to the LIFO reserve amount multiplied by the tax rate (35 percent) and then divided by eight to reflect the expected implementation of this rule as outlined in the U.S. Treasury Department' Green Book. This reduction in free cash flows would subsequently reduce the value of the firm as estimated by the free cash flow valuation model, which, in turn, would reduce the market value of the company' equity, further affecting the Altman Z-score calculation. This potential reduction in the market value of the equity also has possible implications for the company's expected public offering of stock, a significant issue given the company's belief in needing this new source of financing to fund future growth.

You should write a short report or memorandum to Mr. Minnie in which you describ your calculations and analysis and provide a summary of the potential implications. This should include an analysis of the company' current Altman Z-score, a summary of the free cash flow model for estimating the value of the company' equity, an explanation of the necessary adjustments to the financial statements should LIFO no longer be allowed, an analysis of the recalculated Altman Zscore based on the adjusted financial statement figures, and a discussion of the potential problems for the proposed stock offering given the possibility of lower valuations being made for the company because of the reduction in free cash flows from having to make larger tax payments.

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ENTERING THE ICE CREAM BUSINESS: A CASE STUDY OF KLEINPETER FARMS DAIRY

John James Cater III, Nicholls State University Ken Chadwick, Nicholls State University

CASE DESCRIPTION

The primary subject matter of this case is strategic management for small business, specifically developing a new product and entering into a new competitive arena for an established small family business. Secondary issues examined include marketing strategy, human resource management, and operations management in the small family business. The case is appropriate for junior and senior level undergraduate courses. The case is designed to be taught in one class hour and is expected to require approximately three hours of outside preparation by students. The events described in this case are based on real world experiences.

CASE SYNOPSIS

Jeff Kleinpeter, fourth generation CEO of Kleinpeter Farms Dairy, has boldly led his family's business into a new product/market area, specifically the production and distribution of ice cream. For nearly one hundred years, Kleinpeter Farms Dairy has served the south Louisiana area as the leading milk processor and distributor, but now the company has invested millions of dollars in a new, but related product. Jeff seeks to build on the loyalty and goodwill generated among consumers because of Kleinpeter's excellent reputation for high quality milk products in the south Louisiana area. Kleinpeter appeals to local customers through cross-branding other Louisiana products, such as Ponchatoula strawberries, Bergeron pecans, and Elmer's Gold Brick Eggs. After the new product is launched, the company experiences challenges in marketing, operations, and human resource management.

Key words: small business strategy, new product development, marketing strategy, family business

INTRODUCTION

Stepping into a quiet corner down the hallway from the buzzing noise of the auction, Jeff Kleinpeter smiled as he spoke into his cell phone, "Sue Anne, we are in the ice cream business. "There is no turning back now. We just spent \$58,000 on one piece of equipment."

"Jeff you know that I trust your judgment, but this is a bit over the top, don't you think? Are you sure about this?" Sue Anne questioned in reply as any CFO worth their salt would do.

"I know that this is going to be a huge investment for us. We discussed this at length with dad before flying out here to Dallas. Joe May, our ice cream plant consultant, is here with us and he assures me that this is a great deal for us," answered Jeff. "From the time I received a notice in the mail that a huge ice cream company here was closing down; I thought that this might be our chance to buy ice cream making equipment at bargain basement prices."

"Why did they close down?" asked Sue Anne.

"They said their biggest account had pulled out overnight. It was 60 percent of their business. That was it – they had to shut down," Jeff replied.

"I am glad that Joe is there for the technical advice. We know about milk and the dairy business, but ice cream is new for us. You are sure about this now, Jeff?" asked Sue Anne again.

"In the auction, we bid the \$58,000 on the ice cream freezer itself – the thing that pumps the air in and has the blades that turn to make the ice cream. It has three barrels and makes 1200 gallons of ice cream per hour. Additionally, we bought six fine pieces of equipment for about 10 cents on the dollar. It is beautiful, brand new equipment – state of the art. Don't worry; Joe is advising us on the technical aspects of fillers and shrink-wrappers."

GROWING THE COMPANY: THE NEED FOR ICE CREAM

With the purchase of the ice cream equipment in Dallas, Jeff had started the family business on a great adventure, maybe the biggest risk taken in 95 years at Kleinpeter Farms Dairy. The idea was not new with Jeff. For years, the Kleinpeters had thought about and talked about ways to grow their company and entering the ice cream business in particular had been considered many times before, but this time was different. Jeff remembered a recent conversation with his father, Ben Kleinpeter, just before Jeff flew to Dallas to look at the ice cream equipment.

"I love ice cream and I have wanted to get into the ice cream business. People have asked me about it for years, but I always thought it would cost too much," said Ben.

"I think this time we can make some super purchases on the right equipment to get into the ice cream business," replied Jeff.

"In many ways, the production of ice cream would be a natural fit for our company. We all know that we need an outlet to sell or use the surplus cream from our milk production," mused Ben. "Yes, consumers are demanding more low-fat or skim milk. We have always removed the cream from our milk, but now we have to do this even more so. The days of high demand for Golden Guernsey rich, thick creamy milk are past. I don't think the trend toward low-fat products will change." Jeff added. "We do sell some butter and whipping cream and half-and-half, but not enough to invest heavily in plant and equipment."

"There are other alternatives, Jeff. We could increase our revenues with other products besides milk and ice cream," Ben conjectured.

"Yes, Dad, you are right. We do bottle juice and water. We buy the water from Kentwood, which is natural spring water. We would have to do things like reverse osmosis with our water in order to use it, not that our water is bad. Plus, they buy the plastic bottles from us to put the water in. We have a reciprocating relationship," said Jeff. "Another option would be to invest more heavily in the production of cheese."

"Yes, I have thought of that as well, but which one is going to solve our problem the best? Which one will use the most cream?" questioned Ben.

"Producing ice cream will require more cream than producing cheese. That is one issue, but the other thing is which one might be the most profitable. With our weather in Louisiana, we have only two seasons – hot and hotter," Jeff replied. "Do you think people will buy more cheese here in Louisiana or ice cream?"

"Do people buy more cheese or ice cream here? I think it would be ice cream," answered Ben. "Cheese sells here in Louisiana, but I think that it is mostly the broad market for generic cheese. I mean the cheese that goes on pizza and so forth. There are lots of unnatural ingredients there. We have built the Kleinpeter brand name by producing high quality, great tasting milk. Our strategy is to make a better product, not to be the low-price leader. Our philosophy is to provide a natural product with no artificial ingredients like rBGH (a growth hormone that induces cows to produce more milk)."

"How many competitors are there in the cheese business versus the ice cream business? We would be the only ice cream producer locally in Louisiana," stated Jeff.

"We have been selling a tanker load of excess cream every week, six thousand gallons. We pay a premium price to the dairy farmers for their milk, but then we sell this excess cream on the spot market at a loss, which is not good," Ben declared.

"What can we do with the excess cream? Well, we need a value-added product. This has been going on for years. Grandfather used to sell cream to people in New Orleans and ship it via the railroad to the restaurants. So, I have been thinking about this. How could we add value to this and start making money instead of losing money? Ice cream! It has 12 percent butterfat, which is pretty high," Jeff said enthusiastically.

FAMILY AND COMPANY HISTORY

During the second half of the eighteenth century, Spain, which owned the Louisiana territory at the time, attempted to contain the encroachment of Great Britain and France. The government of Spain issued a call for settlers, particularly Roman Catholics, to come and cultivate the land. In return for this pioneering work, the Spanish government offered generous land grants. Answering this call, Johann George Kleinpeter settled in Baton Rouge, Louisiana in 1774. Johann's family and eleven other Catholic families made the arduous trip from Maryland, coming by raft down the Ohio and Mississippi rivers. Often, they traveled at night through dangerous territory. Once they arrived in Louisiana, the Kleinpeters received a large land grant, including much of the acreage currently belonging to Louisiana State University. Developing deep roots, generations of Kleinpeters have remained in Baton Rouge. Some family members owned general stores, while others farmed the land, growing crops such as sugar cane or tending cows for dairy purposes.

Dairy farmers must milk their cows every day and they need to process that milk very quickly. Therefore, local milk processing businesses sprang up across the United States. In 1913, Sebastian Kleinpeter and his son, Leon Richard Kleinpeter, opened Kleinpeter Farms Dairy to meet the milk processing needs of dairy farmers in Baton Rouge and southern Louisiana. Like their dairy farming neighbors, the Kleinpeters also had a small herd of "woods" cows. The "creamery" or milk processing operation is still thriving today as the largest independent dairy in Louisiana.

Sebastian and Leon Kleinpeter learned from LSU agricultural professors that Guernsey cows produce milk of superior taste, so they decided to augment their herd of cows in late1913 by purchasing two boxcars full of Guernsey cows from Wisconsin and bringing them by train to Baton Rouge. The experiment worked and the Kleinpeters began to specialize in Guernsey milk. This remains one of the keys to the Kleinpeters' success even today, as Kleinpeter milk is well known for its exceptional taste.

Upon the death of Sebastian Kleinpeter in 1929, Leon Kleinpeter continued to manage the creamery business. Leon and his wife, Mary Lillian, had eleven children, of these; five sons and one daughter worked extensively in the milk processing operation. Mary Lillian worked as a bookkeeper for the company for many years. Leon divided the responsibilities of the business among his children. Leon, Jr. became president, Thomas was in charge of the farm, Vincent was the corporation secretary, Michael was the plant manager, Ben was in charge of sales and delivery, and Betty served as bookkeeper following her mother? This sibling partnership managed the family business from the late 1940's until 1987.

Leon passed away in 1984, leaving the business in the hands of his children. At this point, young Ben Kleinpeter, who had spent most of his career in sales, made the bold financial decision to buy out his brothers' interest in Kleinpeter Farms Dairy. In 1987, Ben obtained a bank loan and purchased the business, paying his brothers with the proceeds. In this manner, Ben gained complete leadership of the company and steered it away from possible family entanglements.

Through a combination of hard work to increase sales and belt-tightening on expenses, Ben Kleinpeter was able to pay off the bank loan in four years. Although Ben was successful in retiring the bank loan, the amount of work and complexity of the business was almost overwhelming. Ben's sons Kenny, Ben, Jr., and Steve and daughters Mary Alice and Sue Anne worked with their father in the business. The youngest son, Jeff, entered the family firm in 1987. To help bridge the gap left by the retirement of his four brothers, Ben hired Tom Zicarelli, from outside of the family, as general manager, in 1989. Tom's assignment consisted of operating the business and training the next generation of Kleinpeters to manage the firm. Unfortunately, Ben, Jr. passed away in 1994. Mary Alice left the business in 1995. Then, Kenny left the business to pursue his interest in music in 1998, and Steve also left in January 2003. This left Sue Anne and Jeff as the principal family member managers.

CURRENT OPERATIONS

Tom Zicarelli served as president of the company and provided excellent training and advice until his death in 2003. Today, Jeff Kleinpeter has taken the reigns as president of the company and Sue Anne Kleinpeter Cox is the secretary-treasurer and CFO. They form the fourth generation of Kleinpeters to run the operation and now lead a team of 185 employees. Ben has retired and passed his stock on to his children. Jeff and Sue Anne own the voting stock, while the other siblings hold non-voting stock. In essence, this leaves the corporation in control of the family members actually managing the business. The non-voting stockholders share in annual dividends and in the proceeds were the business to be sold. The current line of Kleinpeter products include milk, orange juice, butter, oleo, eggs, cottage cheese, yogurt, coffee, tea, punch and containers made for both Kleinpeter and other companies, a service that was added in 2005. Milk accounts for roughly eighty percent of company sales as Kleinpeter Farms Dairy processes 60,000 gallons per day.

The company distributes the milk and other products to approximately 3,000 stores, restaurants, and institutional facilities within a 150-mile radius of Baton Rouge (Riegel, 2009). Recently, following the Interstate 10 corridor, Kleinpeter connected with retail outlets as far west as Lake Charles, LA and as far east as Biloxi, MS. Enjoying a close relationship with Rouse's Supermarkets, Kleinpeter has benefited from the south Louisiana grocer's purchase of twenty former A&P Sav-A-Center Supermarkets in the New Orleans and southeastern Louisiana region. Rouse's operates sixteen of those stores and affords ample shelf space for Kleinpeter products. At present, supermarket sales account for approximately seventy percent of Kleinpeter's overall business. Additionally, the company sells to restaurants, nursing homes, hospitals, schools, offshore catering, food services, and manufacturers.

BEGINNING ICE CREAM OPERATIONS

After flying back to Baton Rouge, Jeff immediately began the process of building an ice cream plant, "I called the architects, the builders, and the contractors that we knew here in Baton Rouge and said, 'We have to build an ice cream plant.' This was in July and I wanted to have the building ready by December 31 in order to recoup money on the Geaux Zone financing and tax credit incentives." Amazingly, Kleinpeter was able to accomplish this ambitious goal. "The contractors worked their tails off. The equipment people got us all the other things that we needed - the piping, the compressors, and a huge generator that can run this whole facility in case we lose power during a hurricane. We did it in four and a half months," Jeff explained. The CEO's energy and enthusiasm, along with solid local ties to builders, contractors, and government agencies, enabled the company to build the ice cream plant in record time. The total investment for the project came to \$5.5 million. The Kleinpeter ice cream was first sold in Baton Rouge area supermarkets on January 28, 2008. Building on their established relationships, Kleinpeter began their ice cream sales with the half-gallon size, which is targeted for supermarket customers. Soon after, the company developed a pint size and mini-cup size. According to Jeff Kleinpeter, "The pints are a convenience store item. The majority of the sales of pints are in convenience stores. We are shopping right now for 30 or 40 chest-height display case freezers to put in convenience stores. It is part of what you have to do sell the ice cream." The mini-cup size is primarily targeted for children.

LOUISIANA FLAVORS

Jeff led the marketing research for the company to determine which ice cream flavors consumers in Louisiana preferred. Results showed that the best selling flavors are vanilla, chocolate, and then strawberry. Vanilla leads all flavors with sixty percent of the market. So, Jeff started with the top three and then began to add other flavors. According to Jeff, "We started with vanilla, went to chocolate, and then to strawberry, made with Ponchatoula strawberries." Perhaps, the Ponchatoula strawberry flavor served as inspiration to produce other ice cream flavors with the Louisiana local flair. "Then, we went to butter pecan, made with Bergeron's pecans from New Roads, a third generation family business," explained Jeff. "We went to pralines and cream, made with Aunt Sallie's pralines from New Orleans and Bergeron's pecans, Louisiana cane sugar, and Kleinpeter milk and butter, rBGH free (no artificial growth hormones are given to the cows). Then, we went to no-sugar vanilla and no-sugar chocolate. Then, we went to sweet potato pie, made with Bruce Food's sweet potatoes from New Iberia, a fourth generation family business. Then, we did the Gold Brick Egg flavor. Elmer's Gold Brick Egg was started in New Orleans and has been in business for 140 years and is now in Ponchatoula. The people at Gold Brick are thrilled because 95 percent of

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their sales occur in just two and a half months. Now, they can start selling their product in the summer time." One year after the introduction of ice cream at Kleinpeter, sales of the confection comprise eight percent of total company sales.

Kleinpeter Farms Dairy now produces all of the top selling flavors of ice cream and has worked its way down the list to the smaller selling flavors. For instance, while vanilla is sixty percent of the market, no-sugar vanilla is only about 1.5 percent of the market. "We followed the market until we got down below three percent. Now, we are free to do whatever we want. What has been effective has been using Louisiana ingredients and Louisiana companies that we all know and love. The biggest hit has been Gold Brick Egg. It keeps selling out and we haven't been able to make enough to get it in all the stores," states Jeff. To date, Kleinpeter is the only producer of Gold Brick Egg ice cream and sweet potato pie ice cream in the world. Jeff exudes enthusiasm for the new products, "In the food section of the paper (Baton Rouge Advocate) last Thursday, the food editors voted Gold Brick Egg their most favorite flavor. It could be bigger than pralines and cream and the third most popular flavor. Gold Brick Egg now has a dark chocolate Heavenly Hash, which may be our next flavor. What is next? Perhaps, bananas foster flavor, made with Aunt Sallie's bananas foster pralines or banana split or banana pudding. We are looking at a blueberry flavor, made with Louisiana blueberries, or Ruston peach."

EXTERNAL CHALLENGES

While Kleinpeter has begun selling ice cream in south Louisiana, there are some external challenges that have affected the company. It has not been all peaches and cream. The first major element in the external environment is the country's economic recession. Kleinpeter built their ice cream plant as the nation stumbled into a recession. "I watch our sales closely every day, comparing this year to last year. Every month our sales have increased. Restaurant sales have slowed, but our grocery sales have increased. To maintain our market share and try to keep customers from switching to store brands of milk and ice cream, we have run some advertising campaigns to raise the awareness of our brand."

Recently, Kleinpeter has run two very interesting advertising campaigns – one featuring Ben and Jeff as a father and son in a family business and another that shows the Kleinpeter cows as employees of the company. The family business ads appeal to families with children, a prime target market for Kleinpeter. Consumers love the employee cow ads, which have also been adapted to ice cream. Jeff explains, "A group of our employees come to me with an idea. The screen splits and there are three cows coming up to me. Since our milk is so good, why don't we make ice cream? So, we listened to them. It shows me in the lab experimenting with chocolate. In another commercial spot, we talk about using local ingredients. Now, we are proud to introduce Kleinpeter ice cream. We show the ice cream. We thank you and the employees thank you. We show three cows." The second major element in the external environment for Kleinpeter Farms Dairy is intense competition in both the milk and ice cream arenas. While the only competitor that sells both products in the south Louisiana market area is Borden's, there is plenty of rivalry for grocery store shelf space. In addition to store brands such as Great Value and Rouse's, milk competitors include Barbe's, Brown's Dairy, Horizon Organic, Lactaid, Lala Foods, and Silk Soy Milk. Kleinpeter is not the cheapest milk on the shelf, typically pricing at about one dollar to two dollars higher per gallon than the low price leaders, but still addressing the broad market. In terms of strategy, Kleinpeter relies on superior tasting; rBGH free, locally produced milk to create a competitive advantage (Barney, 1991). This competitive advantage allows the company to command a higher price for its products, using the generic strategy of product differentiation (Porter, 1980).

In the ice cream arena, the leading competitor is Blue Bell, which is a regional company operating in twelve states with plants in Texas, Alabama, and Mississippi. Perceived as a strong marketing company with a good product, Blue Bell leads the market in south Louisiana with as much as seventy percent of the business. According to Porter's five forces model, Kleinpeter, as a new entrant in this product market must find a way to compete successfully with entrenched competitors (Porter, 1979). Following the same strategy as their milk, Jeff Kleinpeter states, "In order to differentiate ourselves, we have to make ice cream as good or better and give it more value. Our ice cream is rBGH free. We market the fact that we are a Louisiana product and that we are buying other Louisiana products to put in our ice cream, which is called cross branding. People here in Louisiana like to use local products." Other ice cream competitors in the broad or general market include store brands, Brown's Velvet, Blue Bunny, Kemp's, Edy's, and Breyer's. Ben & Jerry's and Haagen Dazs, while certainly well known, compete in the super premium category of ice cream. These companies make a product with 14 percent butterfat and are priced approximately two times higher than Kleinpeter.

OPERATIONAL CHALLENGES

The cool morning mist was just beginning to rise, revealing dark green grass heavy with dew. In the distance, the gentle moans of cows fresh from milking and returning to the pasture could be heard above the smooth roar of rubber car tires on Airline Highway and the bump and rattle sounds of delivery trucks bouncing out of the gates at Kleinpeter Farms Dairy. Inside the unpretentious, but serviceable company headquarters, Jeff met his sister, Sue Anne Kleinpeter Cox, at the door to Jeff's office and greeted her warmly with a firm handshake and a sunny smile. "It's good to see you, Sue Anne. Thanks for dropping by this morning; I would like to discuss a few things with you concerning our ice cream operations."

"Jeff, you know I am always willing to listen and offer my opinion, but it seems to me that things are going well with the ice cream," replied Sue Anne.

"Well, they are, Sue Anne. We planned things out fairly well. We knew that we would have to add some employees and some trucks to deliver the ice cream. We have added about twenty employees and we have bought six new trucks in the first year since introducing ice cream. We are up to about 110 units including trailers, dry vans, and trucks. As you know, the ice cream truck has to be -20 degrees and the milk has to be 35 degrees. It is a whole different truck. This is raising some challenges for us because ice cream does not have the same delivery requirements as milk," said Jeff. "For big stores, we deliver milk every day, but ice cream can be delivered every other day. We do need to check the display of ice cream every day. Our turnover in ice cream is not as fast as it is for our milk. I wish it were. Even if a truck driver had ice cream on his truck, he would only deliver it every third day or so. Now, on an ice cream truck, the driver has 75 accounts as compared to about 20 accounts for milk. It is a different delivery program."

"We realized from the beginning that we could get some synergy between milk and ice cream production through the use of our excess cream, but we still need to combine the delivery operations because we are one small business, not some sort of inefficient conglomerate," remarked Sue Anne.

"I hope we will get to the point where we have to go to all the stores for ice cream every day, but even our competitors do not do that," Jeff stated. "I have seen companies that have both milk and ice cream. They wound up having separate representatives for their milk and their ice cream."

"We certainly do not want that situation here at Kleinpeter," agreed Sue Anne.

"I did not think that we did either. So, I told the reps, 'When you go into a store, you check both the milk and the ice cream.' Doesn't that make sense instead of two guys walking into a store with one checking ice cream and the other checking milk?" questioned Jeff.

"We do have separate sales managers for milk and ice cream," remarked Sue Anne. "One rep having two bosses is not a really good thing."

"That is why it is a challenge for those two sales managers to be really close. They are right next to each other in the same office, sharing thoughts on how to direct the reps," Jeff replied.

"There are always growing pains when we expand our business. It sounds like we have an unusual organizational structure going here," Sue Anne offered.

"With a new ice cream division, you may have to share and work together because the new division is not big enough to support an entire team," Jeff added.

"Jeff, we have some human resource and organizational structure issues here. Meanwhile, we are expanding with an entirely new product line in the ice cream, developing completely innovative new flavors of ice cream, and entering new geographic market areas both to the west in Lake Charles and to the east with the new Rouse's stores and into Mississippi. Are we spreading ourselves too thin to cover all this growth?" asked Sue Anne.

REFERENCES

- Barney, J. 1991. Firm resources and sustained competitive advantage. Journal of Management, 17: 99-120.
- Galbraith, J. (1973). Designing Complex Organizations. Reading, MA: Addison-Wesley Publishing Co.
- Porter, M. E. 1979. How competitive forces shape strategy. Harvard Business Review, March-April.
- Porter, M. E. 1980. Competitive Strategy, The Free Press, New York.
- Riegel, S. 2009. Buying the farm, Greater Baton Rouge Business Report, April 7, 32-33.

VALUING A TURNAROUND PLAN FOR A COMPANY IN THE RESTAURANT EQUIPMENT BUSINESS

Thomas J. Gjerde, Butler University Christopher Harlow, Butler University

CASE DESCRIPTION

The primary subject matter of this case concerns the valuation of a proposed turnaround plan using a discounted cash flow approach. Secondary issues examined include Spreadsheet modeling, sensitivity analysis and indentifying the fundamental drivers of value. The case has a difficulty level four, appropriate for senior level. The case is designed to be taught in one class hour and is expected to require four hours of outside preparation by students.

CASE SYNOPSIS

How could the company that virtually invented the frozen margarita dispenser find itself on the verge of ruin? Throughout its history, TastySlush frozen desert and beverage equipment was known for quality, durability and ease of use. Clients include many high-profile restaurants and fast-food chains. However, competition and a failure to maintain the high quality standard on which the company built its reputation have lead to stagnant sales growth and a steady decline in market share.

Frustrated and seeking new ideas, the management team hired an outside consultant. The consultant is currently working with management to put together a multi-stage plan to ensure TastySlush's long-term viability and restore the company's reputation as an innovator that produces high quality equipment. A critical aspect of the first stage of the consultant's turnaround strategy is the identification of potential undeveloped markets and the key factors that will drive value and growth. In order to realize the strategy's full potential, TastySlush needs to purchase new equipment and expand warehouse capacity. Management is hesitant to commit scarce funds to the project and requires a quick return if the project is accepted.

TASTYSLUSH

Following several years of stagnant sales and declining market share, the TastySlush management team concluded that efforts to improve company performance needed reevaluation. TastySlush began as a family owned and operated business but was sold in the early 1990's to a

management group headed by Margarita F. Rozen. Ms. Rozen's goal was to gradually increase TastySlush market share by capturing a large fraction of annual industry sales growth. Ultimately, she hoped to turn TastySlush into an industry sales leader. Prior to becoming principal owner, Ms. Rozen worked as president of TastySlush. Her seat-of-the-pants style of management matched that of the owners and when they decided to sell the business and retire, Ms Rozen jumped at the opportunity.

Ms. Rozen and her new team initially relied on a plan that would use debt to fund growth. However, Gorilla Freeze, a competitor in the industry with scale-driven cost advantages, saw the change in ownership at TastySlush as an opportunity and made a grab for market share. Prior to that time, TastySlush had enjoyed a stable customer base and enjoyed modest pricing power. The unexpected change in the competitive landscape caught Ms. Rozen and her management team by surprise. Gorilla Freeze cut the prices they charged customers for their equipment and made aggressive offers to current TastySlush customers. As a result, sales slowed at TastySlush until the possibility of default became a frightening possibility.

Frustrated and seeking new ideas, the management team hired a consultant. The consultant is currently working with management to put together a multi-stage plan to ensure TastySlush's long-term viability and restore the company's reputation as an innovator that produces high quality equipment. A critical aspect of the first stage of the consultant's turnaround strategy is the development of a sales and marketing plan. In order to realize the plan's full potential, TastySlush needs to purchase new equipment and expand warehouse capacity. Management is hesitant to commit scarce funds to the project.

Background

TastySlush began manufacturing frozen dessert and beverage machines from its Kokomo, Indiana location in 1951. The company quickly established itself as an innovator within the industry. TastySlush built the first custom beverage mixing machine in 1951, the first pressurized freezer, the 'TastyPush' in 1962, and the first self-cleaning slush machine in 1972. The slush machine was dubbed "Indiana's Finest Invention" and is on display in the Indiana State Museum. Millions of people have enjoyed frozen margaritas, daiquiris, slushies and various other frozen concoctions dispensed from a TastySlush machine.

Throughout its history, TastySlush frozen desert and beverage equipment was known for quality, durability and ease of use. TastySlush sells its equipment and replacement parts through a nationwide network of distributors and by 1989 sales reached \$34 million. (The company name and certain financial data are changed in accordance with a confidentiality agreement.) Clients included many high-profile restaurants and fast-food chains. However, competition and a failure to maintain the high quality standard on which the company built its reputation forced TastySlush to sell some of its capacity and sales fell to \$20.4 million by 2006, roughly 6% of the \$340 million

market. Management found it increasingly difficult to meet debt obligations as revenue declined. Lenders indicated any new loans, if granted, would carry a 15% annual rate of interest. TastySlush was in a struggle for its corporate life.

Investing in Growth

In order to establish a marketing plan, the consulting team determined the size of market for TastySlush equipment. Figures 7 and 8 depict the market size by key states for nine industries that use TastySlush equipment, or that of its competitors. Schools and grocery stores were identified as large markets in which TastySlush had relatively little penetration. The results of the marketing study also revealed a large market for TastySlush products in its home state of Indiana.

Restaurants were one of the key markets for TastySlush products. However, the feedback that TastySlush was receiving from its distributors indicated the quality of TastySlush equipment was slipping. The relationship between the distributors and a national burger chain, one of TastySlush's largest customers, was becoming strained due to frequent failures in recently purchased Tasty Slush equipment. In general, distributors claimed that defects in newly installed equipment harmed both the sales of TastySlush equipment and the reputation of TastySlush as a company. Figure 6 contains the results of a survey that supports those claims.

The consulting team found 3 promising marketing thrusts that could benefit TastySlush in the near-term. However, an initial capital investment of \$2,080,000 is required. Half of the proposed investment is targeted for plant expansion, while the other half would be allocated to update fabrication equipment in order to address quality issues.

- 1. Expanding the distributor network: TastySlush currently uses 10 distributors to sell its equipment. It was clear from the market analysis (see Figure 8) that a large national market exists for TastySlush machines, including many un-served or under-served markets. TastySlush must push existing distributors to expand their sales efforts into new markets while at the same time, sign new distributors that already have a presence in these markets. The payoff could be substantial. TastySlush contribution margins are approximately 30%, and existing distributors mark up prices between 10% and 15%. After reviewing the market study, a few questions came to mind: What are the best locations for expansion? How long would it take to penetrate these markets? What percentage margin would need to be negotiated for new distributors? Should new distributors be added right away or should they be added gradually over the life of the project? Is there sufficient capacity to support additional sales? Would there be any negative impact on existing distributors?
- 2. Sell direct in Indiana: The market that exists in TastySlush's backyard is one of the underserved markets noted above (see Figure 7). In order to capture more of this market and use it as a test market for new business initiatives, TastySlush is evaluating a "sell direct"

strategy. TastySlush management mentioned that they expect distributors to hold at least one month's sales in inventory. They also expect distributors to manage an equipment service provider or run their own service department. TastySlush provides distributors with marketing literature, but all other sales and marketing costs are born by the distributor. A sell direct initiative would require TastySlush to hire a sales force, placing them in direct competition with existing distributors. How would the distributors respond? What additional costs/benefits would they incur? How much would it cost to service the machines? How large is the total Indiana market? How quickly could they penetrate this market? How would this approach change their overall contribution margin and working capital? Would there be any negative impact on existing distributors?

3. Drive service parts sales: For TastySlush machines to run optimally and efficiently, the company recommends that the consumable parts, or service parts, be replaced every six months. TastySlush management knows that the average replacement times are above 18 months. Margins on the parts kits run between 1.5 to 2 times the margins on the machines. However, the manufacture of parts can only occur during periods of slack time in the normal manufacturing schedule. Should TastySlush purchase new equipment devoted to parts production rather than spend time and money retooling? What is the total volume potential, on an annual basis for these kits? How rapidly can the average replacement time move from 18 months to 6 months? What effect would this have on business' margins?

The consultants and management agreed that any marketing plan to increase sales must be accompanied by a set of capital improvements aimed at updating the fabrication equipment and expanding plant capacity to handle the expected increase in demand, and additional space to store inventory for the "Sell Direct to Indiana" thrust.

TastySlush also has a relatively heavy debt burden. TastySlush's bank is reluctant to extend more credit. Recent loans to TastySlush were made at 15%. Consequently, Ms. Rozen requires that all projects pay back within a 4-year period so the discounted cash flow analysis must assume the project terminates at the end of 2010 even though assets associated with the capital spending will not be retired.

Ms. Rozen noted that the industry is changing with considerable consolidation and the "800 lb. gorilla" that has focused on this market produces a formidable product line. (See Figure 4.) It is not an easy time or place to increase market share, but the consulting ream feels there may be an opportunity to "live under the radar".

The next step is to analyze the information in the following Figures and then present a summary of recommendations to TastySlush CEO and principal owner, Margarita F. Rozen. Ms. Rozen is unfamiliar with discounted cash flow techniques and in the past has rejected plans simply because she does not trust the accuracy of cash flow projections and discount rate estimates. In order to respond to Ms. Rozen's requests and concerns, the summary must include:

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- 1. A Pro Forma Income Statement.
- 2. *A discounted cash flow analysis based on an all-or-nothing approach to the 3 marketing thrusts.*
- *3. A section that quantifies the potential impact of errors in your forecasts of key variables.*
- 4. *A discussion of the fundamental drivers of value.*
- 5. *A summary or your recommendations and concerns.*
- 6. *A discussion of the feasibility of rolling out the plan in stages rather than an all-or-nothing approach.*

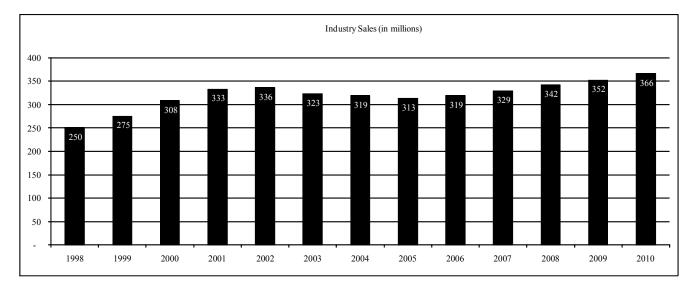


Figure 1: Frozen dessert and beverage machine industry sales 1998 - 2010

Source: 2002 TastySlush strategic document. 2007 - 2010 Forecasted Sales, source: authors.

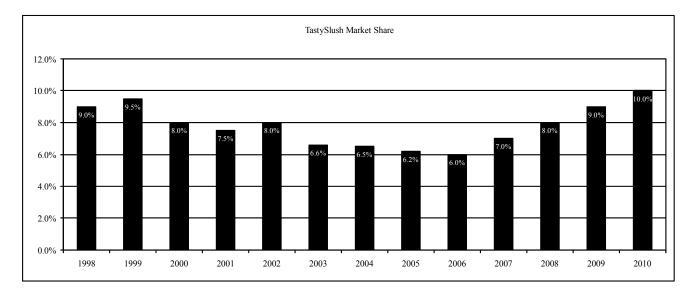


Figure 2: TastySlush market share 1998 - 2010

Source: 2002 TastySlush strategic document. 2007 - 2010 Forecasted Sales, source: authors.

Figure 3: Expected percent of sales for the period 2007 - 2010.					
Item	Percent of Sales				
Freight	1.00%				
Direct Materials (COGS)	60.00%				
Direct Labor	0.50%				
Variable Overhead	0.70%				
Fixed Cost of Sales (Plant Support)	7.00%				
Marketing & Sales Expense	9.00%				
General & Administrative	8.00%				
A/R	11%				
Inventory	16%				
Item	Percent of Inv.				
A/P (60% of inventory)	60%				

	Figure 4: Consultant's view of the competitive environment.
Goril	la Freeze:
*	Strengths - Corporate-owned, 16 to 20 times the size of TastySlush, complete product line, factory- trained service network, ownership in distributors, complementary products for restaurants.
*	Weaknesses – Focus on big burger chains may leave other customers with 2 nd tier service, distributors have a reputation of arrogance.
Euro	Freat:
•	Strengths - Very strong presence and market share outside the U.S., legendary reputation for Gelatto and batch freezers, strategic push into TastySlush's market with acquisition.
*	Weaknesses – Less product strength than Gorilla Freeze, similar in size to TastySlush, churn in distributor base due to merger.
Arcti	c Equipment:
•	Strengths – Strategic push into TastySlush's market with acquisition, Product line contains models TastySlush does not have.
•	Weaknesses – Historically focused only on niche ice cream markets, churn in distributor base due to merger.

	Figure 5: Consultants summary of key sensitivities and risks.
•	Timing - Implementing during 2Q08 will take advantage of high volume months. Delaying the marketing and financial activities will only delay the return to sustainable profitability.
•	Opportunity Costs - The analysis assumes that equipment upgrades and a modest facilities expansion will be sufficient to handle additional demand from new markets. It is possible that existing distributors and their accounts will switch brands if management is unable to effectively manage unit growth.
•	Scale – The analysis assumes scale driven efficiencies will reduce COGS as a percent of sales. If these scale efficiencies do not materialize then the cash flow growth will suffer.
•	Benefits - The benefits in this model hinge on the incremental top-line growth that arises from professional marketing support. The ability of new sales staff and distributors to generate new sales is a critical driver of top line growth. To the extent that sales do not materialize, the benefits side of the equation falls proportionately.
*	Competitive Position - The strategy for marketing is to place TastySlush on the radar with the lead players in the industry. Monitoring and responding to negative competitive reaction will be necessary to ensure momentum is sustained.

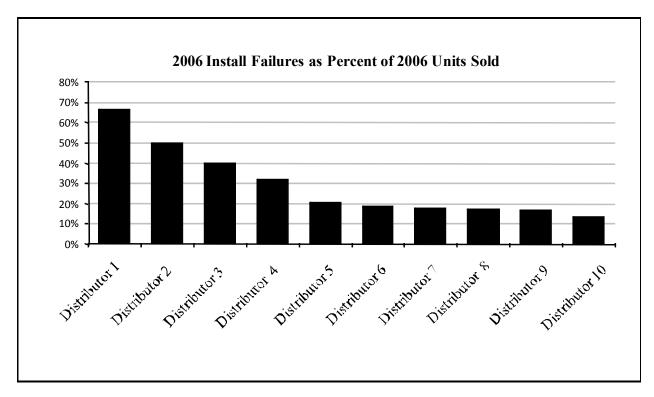


Figure 6: Results of a quality survey of TastySlush distributors.

Figure 7: Selected Market Study Data - Indiana							
Market Size Data by Number of Establishments							
SIC Code	Description	Count in U.S.	Count in Indiana				
581208	Restaurants	326,259	7,194				
5541	Gas Stations	98,650	2,141				
836110	Retirement & Life Care Community	15,623	293				
821103	Schools	164,027	3,452				
806202	Hospitals	15,840	422				
701111	Resorts	7,396	52				
799921	Concession Compaines	516	11				
581203	Ice Cream Shops	12,233	332				
541103	Convenience Stores	85,221	1,717				

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Market Size Data by Number of Establishments							
SIC Code Description Count in U.S. Count in In							
581301	Bars	37,802	1,267				
8221	Colleges/Universities	18,118	376				
5411	Grocery Stores	146,317	2,702				
554103	Truck Stops & Plazas	2,613	83				
531104	Discount/Department Stores	32,549	888				
	Total	963,164	20,930				

	Figure 8: Selected Market Study Data - Key States								
Market Size Data by Number of Establishments									
SIC Code	SIC Code Description U.S California Florida Texas New York						Pennsylvania		
581208	Restaurants	326,259	39,787	19034	22795	22111	13688		
5541	Gas Stations	98,650	6,952	5311	8969	3883	3533		
836110	Retirement & Life Care Community	15,623	1,746	1035	674	864	1132		
821103	Schools	164,027	15,867	6036	12581	10807	7249		
806202	Hospitals	15,840	1,522	840	1201	1058	854		
701111	Resorts	7,396	718	769	234	167	118		
799921	Concession Compaines	516	58	43	54	40	28		
581203	Ice Cream Shops	12,233	1,050	571	1015	769	1015		
541103	Convenience Stores	85,221	4,353	5422	9049	3211	2897		
581301	Bars	37,802	1,573	1481	1009	2419	2937		
8221	Colleges/Univ ersities	18,118	1,716	902	970	1064	611		
5411	Grocery Stores	146,317	12,675	8084	13244	7529	5345		

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Figure 8: Selected Market Study Data - Key States										
	Market Size Data by Number of Establishments									
SIC Code	SIC Code Description U.S California Florida Texas New York Pennsylvan									
554103	Truck Stops & Plazas	2,613	115	74	424	44	71			
531104	Discount/Depa rtment Stores	32,549	1,764	2199	3134	1254	1445			
	Total	963,164	89,896	51,801	75,353	55,220	40,923			
Infousa.com										

INCOME INFLATION: ABSORPTION COSTING VS. VARIABLE

Geri B. Wink, Colorado State University – Pueblo Laurie J. Corradino, Colorado State University – Pueblo

CASE DESCRIPTION

The primary subject matter of this case concerns income inflation opportunities when GAAP based absorption costing is used as compared to internally used variable costing when more inventory is produced than sold. Secondary issues examined include distinctions between financial and managerial accounting; ethical responsibilities of managers, Certified Public Accountants and Certified Management Accountants; organizational climate of institutions; fixed costs vs. variable costs; and how inaccurate reporting in one year may affect financial statements in other years. This case can be tailored to three different difficulty levels; level two, appropriate for sophomore Principles of Managerial Accounting; level three, appropriate for junior Cost Accounting; and level five, appropriate for graduate level Managerial Accounting. This case is designed to be taught in one-half hour of class time and is expected to require one hour of outside preparation by students.

CASE SYNOPSIS

Robert had no idea how much his life was about to change. He thought he had acquired a "forever" career with a financially strong company. What he had not considered, though, was the effect his new supervisor could have on his career.

This case examines the income inflation opportunities available to unethical managers. These opportunities arise when production exceeds sales and occurs as a result of the differences between absorption costing and variable costing.

An absorption costing income statement is provided at three different sales levels with production remaining constant. The case asks students to use that information to prepare a variable costing income statement at those same levels assuming production remains constant. The case also asks students to differentiate between fixed and variable costs, to discuss ethical choices, and to discuss the "tone at the top".

INTRODUCTION

Robert had no idea how much his life was about to change. He thought he had acquired a "forever" career with a financially strong company. What he had not considered, though, was the effect his new supervisor could have on his career.

Robert Gonzales was a 28-year-old CMA and CPA who had recently become a member of the Institute of Management Accountants (IMA) and the American Institute of Certified Public Accountants (AICPA). He was in his first year of being employed at a vehicle manufacturing facility. For years, the plant had prided itself in its multiple lines including both compact cars and sport utility vehicles (SUVs). His supervisor, Gail Smith, was also a CMA and CPA. She had been with the company six months.

Robert, having consulted with the company's former CPA, was aware the business had always used absorption costing for external reporting purposes as required by U.S. Generally Accepted Accounting Principles (GAAP). Income for internal reporting, though, had been calculated based on variable costing, and it was those numbers that were used for employee compensation and end-of-year bonuses. Those were the all-important numbers to most of the employees and especially to Gail.

Who wouldn't want to find a way to boost company income and get a few extra zeros added to one's paycheck, right? It was, therefore, no surprise that Gail, being the clever CPA that she was, decided to "test" the options herself. It was the perfect opportunity. Robert was relatively new to the company and to the profession itself. Gail was fairly confident that Robert would be more than willing to listen to her. She was his supervisor, but, more than that, during the few months that she had known him, he had always been eager to listen to her suggestions and to openly demonstrate his admiration for her and her many years of experience. Being fully aware of GAAP requirements, she knew there was nothing she could alter in the external realm. She definitely did not want to arouse any suspicion among the auditors. It was those internal reports that were uppermost on her mind when she sat in her office on that November afternoon. After laboring over the numbers for hours, it finally hit her. There were two costing options, variable and absorption. She was new to variable costing for internal decision making. Previous organizations for which she had worked had considered the method, but they all had ultimately chosen against it. Aha! She had found her income inflation opportunity! When using GAAP based absorption costing as compared to internally used variable costing, if more was produced than sold, then there was a chance for income manipulation. She was not only Robert's supervisor but also one of three main managers at the plant. She was, thus, partially in charge of deciding on an appropriate production level every quarter. Luckily for Gail, the other two managers were not as financially adept as she was. They would never have any clue that she was inflating income.

The economy had been poor lately and that, coupled with soaring gas prices, had caused SUV sales to decline significantly over the past three months. It was another perfect opportunity. Could things get any better than this, thought Gail?

Over the next few weeks, Gail worked tirelessly to craft fail-proof arguments in favor of keeping SUV production constant despite the recent lack of adequate sales in that line. Then the day came to use her verbal arsenal. She met early that day with the other two managers and, going down her, by then, overflowing list of "unsound" arguments that she had creatively spun to her benefit, she won the other managers over. Her self-claimed theory that the economy would soon be flourishing and that future gas prices would drop so low that even the most non-traveler type would hit the pavement to see the back roads of the country in an instant was accepted by her colleagues easier than she had ever imagined. It was time to move on to Robert.

That afternoon she called Robert into her office. She explained to him about the decision to keep production of SUVs steady despite the current sales predicament. He was surprised and confused, but nonchalantly shrugged it off. What did he know? He was just a first-year entrant into the auto industry. Maybe there was something he was missing, something that a little more experience would have revealed. It was not until Gail began to mention something about eliminating the use of variable costing for internal purposes that he became suspicious. She told him that nothing would be changed in the externally submitted financials, but that she felt that it would be best for company decision making if the internal reporting techniques were altered slightly. Robert was open to change, but what Gail was suggesting was not exactly a "slight" change. He had remembered one of his professors dwelling on how changing from variable to absorption costing could cause a significant change in reported income, especially if there was an overabundance of inventory, and it was that same professor who had warned him and his classmates to watch out for such manipulation in their professional lives. But that could not be what was going on here, could it? Gail had only worked for the plant a short time herself, but she still seemed to make decisions in the best interests of the company. He continued to listen to her ideas and suggestions, but refused to agree to any specific method until, as he told her, he had time to conduct further evaluation of the proposals.

Exposure by Robert to more diligent accounting instruction and ethical awareness was not a variable that Gail had factored into her plan. She realized that her simply fashioned arguments, which had worked so well on her fellow managers, would not be sufficient to make Robert a believer. If she wanted her plan to work, she was going to have to amend her arguments so that they had less of a financial foundation. Robert was an astute accountant; she could see that now. To successfully convince him, she recognized that she was going to have to use his lack of industry knowledge to her advantage.

In the days following his encounter with Gail, Robert spent every free moment he had evaluating his supervisor's suggestion. He thought about it and plugged in numbers time and time again trying out various scenarios, and each time it came out the same way. When production remained constant but sales declined, the use of absorption costing as opposed to variable costing resulted in higher reported income. More than ever, he started to believe that it just was not his industry inexperience that was causing him to be leery of the proposed production increases. Maybe it was not sound industry policy at all.

He decided to investigate further into Gail's employment history. He had been on her screening committee six months earlier and her résumé was in his desk drawer. As he scanned the document, he noticed something intriguing: She had only been employed at her last company for a little over a year. Because she had only been there a short while, Robert had surmised that perhaps she was one of those job jumpers who went from job to job using her financial and accounting know-how to get what she wanted from the company and would leave before anyone was able to catch on to her scheme. By that time, though, the company would be reeling from the countless bad and irreversible decisions it made based upon the information she persuaded management to believe to be correct. Keeping such thoughts in the back of his mind, he decided to inspect the résumé further. The next previous job listed indicated Gail had been with that company a mere four months. The other listed jobs were also accompanied by ranges of work dates that were not typical of the profession. Jackpot, thought Robert! There had been similar information flowing through the organization's grapevine, and the records had proved it. The short employment span being related to any deceptive practice was just a gut feeling on Robert's part, but it was an instinct that he felt very strongly about.

To further support his convictions, he decided to dig around for his old accounting textbooks. Sure enough, his cost accounting text illustrated a similar example. The text's evaluation and his own matched. But, why, he asked himself, would Gail want to boost internally reported income? Then it hit him. At the end of each fiscal year, the internally reported figures were reviewed, and based upon the numbers and their changes from the previous year, decisions were made to issue or reject bonuses. Gail must be at it again, he thought; she has been here only six months, but she clearly is directing the company in the wrong direction yet again in order to fulfill her own objectives. Further pondering the situation, he continued and exclaimed out loud, "She must be interested in some extra cash for herself," then thinking about it a bit more, "and it would not really be bad for the rest of us either."

Going along with the plan, though, would cause the other managers to make decisions that would differ from those that would be made if the more proper variable costing method were used. Those decisions would include the choice to continue manufacturing SUVs at a constant level even though they clearly were not as profitable as any absorption-based numbers would indicate. He knew that allowing such a misconception would be wrong, but it would help him and all the other employees who had families to support. He was in a bad situation, and he knew it. It was the type of situation that he had often dreamed and feared about during his preparations to become an accountant and then even more so when he had pursued the Certified Public Accountant (CPA) and Certified Management Accountant (CMA) designations. He had promised to take the CPA and

CMA ethical codes of conduct as his own and now his supervisor's directives and those very codes were in conflict.

Gail, still up to her old tricks, had been working on non-financial arguments to present to Robert in hopes she could still convince him that absorption costing and the production changes were superior to any other choice that the company could possibly make. In her conversation with Robert, she noted that the SUV was the company's legacy and for that matter, was the legacy of the American auto industry. The company could not just decrease production of such a popular line of vehicles even if gas prices were off the charts. Demand would always be there, she argued. As she stated, the whole notion of "going green" was just another fad that would vanish as soon as the economy recovered. With the emergence of a new U.S. President who advocated a comprehensive economic stimulus plan, she further declared that such a positive fiscal state looked more promising than ever. To provide support for the absorption costing method, she contended that absorption costing was good enough for external reporting why should it not be equally sound and acceptable for internal reporting as well. Inside she knew fully well why, in this and many other cases, it would not be acceptable, but she had done it so many times before, it had become nothing for her to be untrue to herself and the ethical codes of her designations. Still, she could see it in Robert's skeptical eyes. Could this be the time when she finally met her match and would be caught in the act?

Gail interpreted Robert's reactions correctly. He was absolutely on to her. Now it was just up to him to decide what to do. He created a spreadsheet based on one set of his previous calculations. To make things simple and to provide an analysis that the other managers might be able to at least conceptually understand, he decided to establish fixed overhead at \$150 per unit based on an estimated overhead and production of \$15,000,000 and 100,000 units, respectively. His estimated figure for direct materials would be \$100 per unit, direct labor would be \$200 per unit, and variable manufacturing overhead would be \$50 per unit. He created comparison budgets for three different levels of sales for SUVs based upon those costs. The absorption portion of that budget is presented in Table 1. He gathered together the remaining support and his counterarguments. All that was left was to decide if he was going to pursue his gut feeling or allow Gail to follow through with her plan once again.

Robert has a meeting with the other managers in two days to discuss his progress with the company. It is an ideal opportunity to disclose his findings. Having only been employed at the company for six months, he is not sure how his allegations and concerns will be received. He and the other employees could be monetarily rewarded if he does not say anything. If he does openly question Gail's tactics with her superiors, his job could potentially be at stake.

Table 1: Based on Absorption Costing								
Partial Income Statement								
	Sales of 100,000 units	Sales of 90,000 units	Sales of 80,000 units					
Sales	100,000,000	90,000,000	80,000,000					
Less: COGS	(50,000,000)	(45,000,000)	(40,000,000)					
Gross Profit	50,000,000	45,000,000	40,000,000					
Less: Fixed Manufacturing Overhead								
Operating Income	50,000,000	45,000,000	40,000,000					
Cost of Goods Sold and Ending Inver	itory							
	Sales of 100,000 units	Sales of 90,000 units	Sales of 80,000 units					
Beginning Inventory	5,000,000	5,000,000	5,000,000					
Add: Production at 100,000 units	50,000,000	50,000,000	50,000,000					
Goods Available for Sale	55,000,000	55,000,000	55,000,000					
Less: Sales	(50,000,000)	(45,000,000)	(40,000,000)					
Ending Inventory	5,000,000	10,000,000	15,000,000					

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MACPHERSON MANUFACTURING COMPANY: STRATEGIC OPERATIONS PLANNING

Patricia LaPoint McMurry University Carrol Haggard Fort Hays State University

CASE DESCRIPTION

The primary subject matter of this case concerns operations management. The case can be used to explore the important connection between sales and operation al decisions in an operations management course. Students are asked to analyze data in order to determine whether models should be retained or eliminated. The case has a difficulty level of four. The case is designed to be taught in two class hours and is expected to require 8-10 hours of outside preparation by students.

CASE SYNOPSIS

As Brian MacPherson gazed from his corner-office window he reflected on the changes to his family's business. The historic building, one of Boston's most distinctive landmarks, was built in 1857 by his great, great, great grandfather, Cyrus MacPherson. Cyrus MacPherson had made his presence known in every aspect of the early company's business. He could be seen on the production floor examining sewing machine parts, giving orders to his operators on how to set up the equipment, and holding the reins of a horse-driven cart to distribute sewing machines to his customers. The elder MacPherson was a demanding tyrant with an unyielding perseverance to insure that the family business grew and survived for future generations of MacPherson's.

Today, MacPherson produces six models, a basic model and five specialty models. While the growth potential for each model varies, all of the models require significant promotional efforts. In some cases, models need to be redesigned in order to become more competitive. Three models operate at 75-80% of capacity, one at 30-35% of capacity, while two models operate at 15-20% of their capacity. Each product has its own dedicated production assembly line.

As Brian reflected on his heritage, he knew that he must continue this family tradition for the generations of MacPherson 's to come. However, he also knew that the 21st century environment was significantly different than that the Cyrus' day. Brian was wrestling with such questions as: Should the company continue to produce all six models? Should some models be eliminated or consolidated with other models in production? When would issues of capacity force a decision about possible changes? Brian knew that his answer s to the se questions would determine whether MacPherson Manufacturing Company remained viab le for future generations.

INTRODUCTION

Brian MacPherson gazed from his corner-office window overlooking the Charles River and reflected on the changes to his family's business. The historic red-bricked building built in 1857 by his great, great grandfather, Cyrus MacPherson , was one of Boston's most distinctive landmarks. Currently, the building houses the corporate headquarters of MacPherson Manufacturing Company, one of the major sewing machine manufacturers in the country and the center of the company's manufacturing operations. Cyrus MacPherson , an immigrant Scotsman, made his presence known in every aspect of the early company's business. He could be seen on the production floor examining sewing machine parts, giving orders to his operators on how to set up the equipment, and holding the reins of a horse-driven cart to distribute sewing machines to his customers in the hot summers and cold winters of New England. The elder MacPherson was a demanding tyrant with an unyielding perseverance to insure that the family business grew and survived for future generations of MacPherson's. As Brian reflected on his heritage, he knew that he must continue this family tradition for the generations of MacPherson 's to come. However, he also knew that the 21 st century environment was significantly different than that the Cyrus' day.

The Global Industry

For the first half of the 20th century, sewing machine sales were steadily increasing in the United States; the latter half of the 20th century, sales remained relatively flat. However, the reverse of this trend in the second half of the 20th century for overseas markets saw a significant increase in sales specifically in the Asian-Pacific region. Led by a strong growth in Japan and subsequently China in 1998, the exports of Japanese and Chinese sewing machines superseded that of the United States.

The major competitor in the United States market is Singer; in the overseas markets, the major competitors are: Asia-Pacific—Brother, Janome, Juki, Jaguar, and Taizhou Jema; Europe—SVP Worldwide marketing the Singer, Husqvarna Viking, and Pfaff brands; Necchi, Elna, and VSM in Italy, Switzerland, and Sweden respectively. SVP Worldwide is the global leader in all product categories.

Historically, global price increases range from 3%-5% on the high end products and 5%-10% on the low-end products. These global prices increases are due to the increases in costs for energy, raw materials, packaging, transportation, labor and currency exchange fluctuations.

SVP Worldwide, the global leader of sewing machine sales reports on their website "tightening credit markets and consumer postponement have combined to cause a ripple effect that

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has reached the global sewing machine industry. Typically, the sewing, quilting, and embroidery markets have been relatively immune to recessionary periods, however, it is not the case with this current recession and is possibly the beginning of a protracted period of substantial contraction" (SVP Worldwide, 2008).

However, according to Consumersearch (2009, May) "sewing is making a comeback, owing to the reality show hit "Project Runway" and the trend toward DIY crafting. The economy may also be influencing more people to try sewing and mending their clothing. "

Sales and Marketing

For the past 10 years, the sales of MacPherson's sewing machines averaged about 100,000 units per year [See Table 1]. The distribution of company sales in the United States and overseas markets currently is 80% and 20% respectively. The product line mix consists of 6 different products: Model A (basic model, lower cost, less product features); 3 specialty models (B, C, and D); and Products E and F (both are the most expensive and have the most features). Models A, B, C, and D are expected to be most popular and have the highest demand. Models E and F, on the other hand, are expected to have limited demand. While the growth potential for each model varies, all of the models require significant promotional efforts. In some cases, models need to be redesigned in order to become more competitive.

Table 1: Sales Data for Each Product for Years 2000 -2009									
Year/Product	А	В	С	D	Е	F	TOTAL		
2000	19000	18,000	5,000	17,000	2,000	1,200	62200		
200 1	18000	20,000	6,000	15,000	2,000	1,200	62200		
200 2	20000	21,000	5,000	20,000	2,400	1,200	69600		
200 3	20000	20,000	6,000	18,000	2,000	1,000	67000		
200 4	22000	25,000	6,000	20,000	2,000	1,400	76400		
200 5	20000	16,000	7,000	20,000	2,100	1,400	76500		
200 6	28000	26,000	8,000	23,000	2,500	1,500	89000		
200 7	25000	25,000	7,000	25,000	2,000	2,000	86000		
200 8	25000	25,000	10,000	24,000	3,000	2,000	89000		
200 9	30000	28,000	11,000	25,000	3,000	2,000	100000		
TOTAL	227000	234,000	71,000	207,000	23,000	13,900			
Source: MacPhe	Source: MacPherson Ma nufacturing Company Sales Department								

Model A [Basic Model]: standard line, starter model, best seller at 30% current domestic sales; potential for growth if promoted sufficiently to highlight its distinctiveness in overseas markets specifically the home market; limited growth in domestic market; promotion should focus on creating an awareness of the product to penetrate the overseas markets; potential for significant growth possible.

Model B [specialty model]: good seller; needs promotion and redesign to become more competitive; currently 28% of sales; potential for significant growth.

Model C [specialty model]: relatively new product (5 years); requires a substantial marketing effort by a more experienced marketing manager to achieve product awareness; currently 11% of sales; potential growth possible.

Model D [specialty model]: a version of the basic model for a niche segment of the specialized commercial markets; possible expansion but would require significantly more resources; 25% of current sales.

Model E [specialty model]: one of the oldest products in the portfolio; perceived as outdated and stodgy; receives very little attention by sales personnel; redesign could make this product more attractive to customers; this model is often used as a "hook" that draws customers who may then switch to Models B or C for actual purchase; 3% of current sales; potential for some growth.

Model F [specialty line]: little marketing activity; high cost to manufacture; limited growth in domestic market only; considered by some top managers as a "staple line;" 2% of current sales; considered the most vulnerable of the 6 products.

Production

All production occurs in a single location in western Massachusetts. The rated capacity of this plant is 95%; Models A, B, and D operate at 75-80% of capacity, Model C is operating at 30-35% of capacity, while Models E and F operate at 15-20% of their capacity. Rated production capacity for each product is based on the 200 9 sales data. Each product has its own dedicated production assembly line. The only compatibility of production capability with minor equipment changes is p roduction 1 lines A, E, and F. All other production lines (B, C, and D) are unique in the production of their respective products. The manager of the "E" production line is a long-term employee. The "F" production line is headed by a new employee who shows signs of bringing new ideas and methods to the slate of methods used in the past. Growth in the "F" production line is the manager's goal, and efforts are being made to increase domestic sales and some promotional activities have already taken place. It is possible, however, that a capital investment of \$50,000-\$100,000 for changeover parts and employee retraining could enable the consolidation of some of the 6 lines. If some of the lines were consolidated, the challenge to production management would be developing feasible production schedules both aggregate and short-term and managing inventory levels and costs.

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To changeover or set up a production line it takes 10 workers per line. The compensation for the production workers is \$16 per hour and benefits are a factor of 1.3. Each line changeover takes approximately 2 hours to complete. Inventory holding costs average \$.60 per unit.

As Brian finished his reflection of the storied history of the MacPherson clan and the company intimately associated with his family, he began to turn his attention to the future of the company. Brian pondered whether MacPherson Ma nufacturing Company should change to meet the challenges of the 21 st century, and if so, how? He knew that he would have to make difficult decisions as to whether the company should produce all 6 models in the future or eliminate some products and if so which one(s)?

REFERENCES

Consumersearch (2009, May). Sewing machines: Full report. Retrieved August 24, 2009, from http://www.consumersearch.com/sewing-machines/review

SVP Worldwide (2008, December 9) . Press Release . Retrieved August 24, 2009, from http://www.svpworldwide.com/481.htm <u>60</u>

GENE LIFE S.A. – PARIS

Tom Morris, University of San Diego Cynthia Pavett, University of San Diego

CASE DESCRIPTION

The primary subject matter of this case illustrates that management styles typically reflect the cultural values from which they evolve, and that management styles are not necessarily transferable across international boundaries. The case should enable students to: (1) Understand the impact of cultural values on managing others. (2) Identify the difficulty of transferring management styles across cultures. (3) Learn about the need for culturally-and country-specific predeparture training for expatriates. (4) Develop a management approach to accomplishing a specific task in a foreign culture. (5) Examine the characteristics typically associated with success as an expatriate manager.

The case is appropriate for senior level undergraduates, as well as first and second year graduate students. The case is designed to be taught in a 90 minute class and is expected to require 1-2 hours of preparation by students

CASE SYNOPSIS

John Williams, armed with an undergraduate degree in biochemistry, an MBA, several years of managerial experience and proficiency in French, was appointed as the Directuer Général of a French medical products company in Paris. The company, Les Medical Equip Direct (LMED), had just entered a partnership with Gene Life, a U.S. firm that had developed an affordable genetic test for type II diabetes. The test kit was tailored to be used by both physicians' offices and hospitals. LMED had a well-developed sales force throughout France and it also afforded Gene Life an entrée to the French market. While John received language training prior to his departure, Gene Life did not provide pre-departure education on either the French culture or its labor laws.

Upon arrival in Paris, John was under pressure to not only reduce what Gene Life considered excessive overhead, but also to quickly get the sales personnel adequately trained to competently sell the test kit. Since genetically based products were a totally new to LMED, training was critical. The time pressures faced by Williams mandated the cooperation and motivation of both the office and sales staff. His first several months in the Paris office were not as successful as he had hoped. His MBA from a prestigious American university had not prepared him for the difficulties in managing a work force in a foreign culture. He must now determine how best to manage in order to successfully lead a new-product launch in an unfamiliar culture.

INTRODUCTION

"April in Paris...chestnuts in blossom...holiday tables under the sun"...or so the song goes. But on that cold, rainy April evening, it was just plain miserable. That would also accurately describe the mood of John Williams, an American expatriate who had been living and working in Paris for just over three months. He still struggled with the language and the unfathomable bureaucracy. Worse yet, he was totally frustrated by his lack of ability to make anything positive happen at work. As he walked along the Seine on his way home from a disastrous few days at the office, he wondered how he was ever going to get the cooperation and commitment he needed to successfully market Gene Life's latest product.

Gene Life Corporation

It was only a short time ago that a group of genetic scientists from the Boston area formed a privately held company to focus on medical applications of genetic sequencing. All of the company founders were research physicians who had been associated with large universities in and around Boston. Since most of the founders were preeminent in their fields, obtaining venture capital was not difficult. The group was particularly interested in developing a genetic test for type II diabetes. This interest was based not only on their expertise but also the results of market surveys sponsored by the American Medical Association. It was clear that physicians were extremely interested in purchasing a potential test that could help in the diagnosis of type II diabetes. But, there was a limit on how much they were willing to pay. Unfortunately, Gene Life's first iteration of a user-friendly test kit could not be sold for any less than \$3,500. Given the feedback from early marking attempts, physicians and hospitals considered the cost prohibitive. A year later, the research team discovered an innovative method to produce a test kit that could be sold to for around \$500. After extensive testing, which produced very accurate diagnostic results, Gene Life started marketing the kit to physicians and hospitals in the United States. It was an immediate success, and the former small research company was immediately thrust into the competitive world of pharmaceutical manufacturing, marketing and sales. They brought in state of the art manufacturing specialists, built an extremely efficient manufacturing facility to keep costs low. This supported their cost leader marketing strategy and discouraged competition. The venture capital partner conducted an extensive marketing survey and concluded that it was in the best interest of all parties to take the company public. The IPO was managed by the Bank of Boston and resulted in \$52 million in new equity ownership capital. Gene Life could now afford to bring their product to the international market.

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John Williams' Background

Because of his unusual background, John Williams was brought in to Gene Life shortly after its inception. Right after high school, John decided not to go to college but rather worked for a construction company that immediately sent him to rural Quebec to build oil pipe lines. He eventually attained the position of crew chief where he managed up to thirty French-speaking Canadians as well as Polish-immigrant workers. However, he wanted more out of life and returned to the U.S. to attend Boston University. After graduating with a degree in biochemistry, John took a job with a large pharmaceuticals company. Three years of tedious, slow moving research led him to the conclusion that he was really more interested in the business aspects of the industry than the science. Hence, he left the job and earned his MBA at Harvard University. Upon completion of his degree, he ran into one of his undergraduate professors at a coffee shop in Fanuli Hall. Dr. Morton, who was one of the founding members of Gene Life, talked extensively about the company, its product and its difficulty in finding a competent manager who both understood genetic science and had the ability to effectively manage people.

When John mentioned his newly acquired MBA from Harvard, Dr. Morton thought that perhaps he could be a good fit for the newly created position of marketing manager for Gene Life. After all, he understood the technology, had solid leadership experience; and then there was his Harvard MBA that gave him instant business credibility. Shortly thereafter, Dr Morton contacted John with a job offer. From his perspective, John was anxious to put his MBA to work, and bringing an exciting new product to market seemed like a perfect entry into the new world of business. After a few days of thought, he accepted the offer.

Now, John was responsible for developing the marketing model that targeted physicians as the ultimate consumer for the diabetes test kits. He immediately hired an extensive network of sales people that were needed to market the kit, and managed them directly. Typically, sales people not only visit physicians in their offices but also attend medical conferences and medical equipment shows. It was critical that John select the right people who knew each local market, the product and their customers. And, he had done just that. Within a short period of time, sales were booming. The first two years yielded over \$10 million in revenues, followed by a leap to \$18 million the following year. The most recent year resulted in \$34 million in sales with a 19% bottom line. John attributed this success not only to the quality of the product but also to his management style. Every two weeks, John met with his regional sales managers to share information and set mutually-agreed-upon goals. Before every meeting, he sent out e-mails asking for agenda items since it was important to discuss issues of interest to his people. He started every meeting by asking the group about the challenges or problems they faced. As he had learned at Harvard, a good leader solicits solutions – not just problems. Hence, he always threw the problem back to the group where lively discussion ensued and creative solutions were generated. John led by example since he expected

the regional sales managers to hold the same type of bi-monthly meetings with their subordinates. His participative management style met with great success.

THE PARIS OPERATION

After the early success of the test kit in the U.S., Dr. Morton, the current CEO, asked John to start a dialogue with the Paris-based Les Medical Equip Direct (LMED) a privately held company. Les Medical Equip Direct had an extensive network of sales people throughout France and had been very successful in selling what were becoming obsolete products. Dr. Morton had collaborated on a major research project with LMED's owner Dr. Adil about ten years ago. After that, the two had maintained a close friendship. Hence, Dr. Adil was very open to an arrangement that might bring a cutting-edge product into LMED's dated product line. After exploring various partnership alternatives, Dr. Adil agreed to accept \$5.5 million in Gene Life equity in exchange for all LMED shares. Thus, LMED became a wholly owned subsidiary of Gene Life, and Dr. Adil remained on as its CEO. However, it was clear to all involved that LMED's current Directeur Général wanted nothing to do with distributing the test kits. He knew nothing about genetic-based testing, disliked working with Americans and was well past retirement age. Thankfully, the Directeur Général tendered his resignation shortly after the agreement was signed. Dr. Morton and Dr. Adil agreed that John's expertise along with his French language skills would be invaluable in the Paris operation and he was offered the job. After all, LMED's sales organization was structured similar to that of Gene Life. Specifically, France was divided into regions and each regional manager reported directly to the Directeur Général. Like Gene Life, LMED marketed their products to individual doctors as well as hospitals. Given the rapid success of the test kit in the U.S., both Dr. Morton and Dr. Adil agreed that they wanted to start selling it France within three months. Needless to say, LMED had no difficulty getting the test kit approved by the French authorities. All that was needed at this point, was to get the sales teams educated and into the doctors' offices.

John's Arrival in Paris

The opportunity to manage the French office seemed so perfect for John. It was located in Paris, which he considered to be one of the most beautiful and desirable cities in the world. Whenever he and his wife traveled, they always chose Paris as the gateway city to Europe. Upon arriving, he could not contain his excitement. What a great city! The art, music, history, architecture, grand boulevards, cafes, restaurants, all combined to make this his dream location. He just knew that this assignment as the new Directeur Général was sure to be an exciting and rewarding experience in a city that he loved!

While settling in, John contacted Michel DeVos, and old classmate from Harvard and current Directeur Général of a French electronics company in Belgium. Michel was a native Belgian,

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worked for a French company and understood the French culture very well. Michel advised John to take care to learn the language, review his French history, and get up to date on French cuisine and wine. However, he made no mention of the differences in managing the French staff. John had a lot of confidence in his ability to succeed. After all, he had traveled extensively, had managed a group of French-speaking construction workers in Quebec and had worked with an extremely diverse group of sales people in the U.S. Based upon his product knowledge and success as a U.S. manager, he knew he would have no difficulty getting the test kit to market in three to six months.

The Office Reality

John's problems began immediately when attempting to converse with the marketing and sales people at his new office. John had spent months in intensive training, refreshing his admittedly rusty French language skills that he learned in Quebec. When his training was complete, his instructors assured him that he would have no trouble making himself understood anywhere in France. Well, technically they were correct. Everyone understood John just fine, and in fact thought he was guite articulate. The problem was that he could not understand them! They seemed to be speaking a French dialect that he could not grasp. When he traveled outside of Paris in any direction, he understood people perfectly. But the Parisians seemed to speak very rapidly, use a lot of slang, and cut the endings off of all the words. It seemed like a different language. This was particularly disappointing because his Berlitz instructors in the U.S. were Parisians and made no effort to explain the difference between the classic French and the Parisian dialect. He ultimately had to hire a local language instructor to help him learn to understand "Parisian." As it turns out, even other French citizens have some difficulty understanding the Parisians. It seems that the Parisians regard any other non-Parisian people with some distain, refusing to respond to them unless their dialect is "correct". John found some relief in this, as he originally thought that the French were rude to him simply because of his Canadian French accent. Fortunately, or unfortunately as the case may be, he felt that the French appeared to be equally rude to any non-Parisian.

John was aware of the hierarchical nature of French society. He understood that the very top positions in industry, government and society went to the graduates of the "Grandes Ecoles" (the great schools) of France, and that the various levels of education received from other educational programs ordered the other industry positions. Fortunately, his Harvard MBA gave him instant credibility and everyone equated his status with the very highest level of French universities. The hierarchy went generally as follows:

Position	School
Enterprise management & high government posts	Grandes Ecoles
Professionals: engineers, attorneys, etc.	5-year university degree
Functionaries: bookkeepers, planners, sales managers, etc.	2-year university degree
Operators: technicians, machinists, secretaries, etc.	Baccalaureate degree
Common workers: clerks, drivers, etc.	No Baccalaureate degree

Promotion from one level to another was very unusual. Once qualifications are obtained, there was little opportunity to improve one's career at a later time, as part time continuing education was not available. There was however, a strong sense of honor associated with each rank, and individuals at each level are bound by this shared code of honor. After all, "Honor is due to each according to their rank" (French proverb). Within each organizational level, a distinct "pecking order" exists based on the "intellectual nobility" of each position. Those positions, which require some conceptual or independent thinking, are considered nobler than those that do not. The job of management is to somehow maintain a clear chain of command while using the sense of honor as a tool to channel energies and increase efficiency in each hierarchical level. But one always maintains the hierarchy and its order.

Technical Product Training

In the U.S., the technical training was first provided to the regional managers who were then put in small groups to generate training techniques and materials for their sales personnel. The regional managers, in turn, trained their sales personnel. John was proud of the way he structured the training seminars. Moreover, he had received accolades for his ability to solicit creative training suggestions from his U.S. regional managers. He hoped to have the same success and level of commitment from the French. All of the French regional managers had been sent an e-mail message requesting their presence at the training session in Paris. The message went out two weeks before the scheduled session and John had made it very clear that attendance was not optional. To facilitate the manager's preparation for the meeting, John promised to send out a packet of training materials in paper (not electronic) format.

Prior to his arrival in Paris, John made a point of having all training materials translated into French. He had Gene Life's U.S. publisher print all materials in both French and English. Very artfully, the publisher placed both Gene Life's and LMED's logos on every page. Since the printed materials arrived after John had sent out the e-mail invitation, he needed to get them in the mail and to each of the regional managers as quickly as possible. All ten boxes of printed materials were sitting in his office when he arrived at work on Monday – less than 2 weeks before the training.

Monique, whose title was Secretary to the Directeur Général, smiled as John passed her desk. She made a flippant comment about the clutter in his office. John had noticed that Monique seemed to have a lot of spare time between telephone calls and devoted hours to manicuring her nails each day. Shortly after Monique's comment, François, the Paris-based regional sales manager, greeted him with a laugh and an inquiry about the boxes. John explained their contents and the need to expedite the material's delivery. He recognized it was a big job and beyond the two clerks in the mailroom.

"I'll just ask Monique to lend a hand and get these things mailed out," said John.

After all, the mailing was a simple matter of unpacking the boxes, placing the materials in envelopes, producing mailing labels and taking the envelopes to the mailroom.

"Oh, I do not think so," replied François, "She is the Secretary of the Directeur Général and she does not unpack boxes or send things out in the mail."

"Well, I'm the Directeur Général", said John, "so I guess I'll just ask her to help out. This doesn't seem like such a big deal to me."

John had called Monique into his small, but comfortable office overlooking the Seine and the hills of Montmarte beyond.

"Monique, it seems that we need to get our training materials out to the regional sales managers today, regardless of how long it takes. I wonder if you would mind helping me out on this project."

"Do you mean unpacking boxes and putting things in envelopes?" asked Monique incredulously.

"Right." replied John.

"I am the Secretary of the Directeur Général, and I don't do clerical mailings." she exclaimed firmly.

"Well, I'm the Directeur Général and I'd like you to help me out." directed John.

Monique's wide-eyed expression collapsed immediately into tears as she picked up her purse, purposefully walked out the office, and slammed the door. John did not know what to do, but Patrice lent him several clerks from the accounting department who helped stuff envelopes and print labels. They, however, departed at 4:00 even though the task was not finished. John managed to get all the training packets in the mail and woefully departed around midnight.

The next day, Monique did not show up at the office. Several days later however, a representative visited John from the Ministry of Labor. It seemed that Monique had applied for unemployment compensation because she had been forced to quit her job due to "an unreasonable request for demeaning work outside her profession." After a brief discussion, the representative from the Ministry concurred with Monique and stated very clearly that the Ministry would award her 90% of her regular salary for the next year, or as long as it took for her to find another professional position of her liking. Naturally, John's company would be responsible for the payments

Clearly, John had violated the nobility and honor of the Secretary of the Directeur Général by asking her to perform the task of a lowly clerk. François had understood this perfectly, but John did not heed his warning. The only thing he could do was to chalk it up to a learning experience via trial and error.

Training Day

The atmosphere in the ballroom at the Hilton Arc de Triomphe Paris, where the training was to take place, was electric. The round tables were decorated with both company's logos, flowers and the latest medical journals. LMED regional managers were happily greeting each other with kisses and hugs and were abuzz with chatter about the prospect of selling the new genetic text kits for type II diabetes. As John surreptitiously listened to various conversations of people milling around the opulent breakfast buffet, he heard several complain about the lack of lead-time between receiving the invitation and the training date. "Wow", thought John, "two weeks is not short!"

The first part of the training session consisted of a joint speech given by Drs. Adil and Morton. They expressed their excitement about working together, briefly described the test kit and appealed to the audience for their commitment to selling the new product. In France, like the U.S., they reminded the regional managers, it is the personal relationship between the physician and the sales person that can make or break a product's success. Additionally, they commented, a belief in the product is critical.

John then took over the training session with a series of lectures on the test kit attributes and some of the science behind its development. He delivered a very structured lecture that was supported by the training materials previously mailed to each participant. Upon conclusion of this second segment, the group took a break and John was surrounded by sales managers who excitedly asked questions and praised John's talk.

After the break, John informed the managers that they were going to work with their fellow managers at their table to develop a training strategy and agenda for their regions. John purposely did not provide many guidelines for the group work since he wanted to elicit their creative ideas. He provided each table with a flip chart and pens and told them that they would have to report their findings to the entire group within an hour. Much to his chagrin, total silence ensued. John did not know what to do or how to get the people at the tables to start talking to each other. He found François among the participants and elicited his help to go from table to table asking people to start writing down their ideas for training their salespeople. After an hour of muted conversation amongst the groups, John was still hopeful that some creative ideas would be proffered. Unfortunately, this was not the case. Most spokespersons from the teams offered suggestions like: reproduce the materials we got today and send them to our people, set up a web site that has copies of the materials we received in the mail, have Dr. Adil come and talk to our people, and so on. All John could do at the end of the day was to tell the group that he would summarize their ideas and let them know

how to proceed with the training of their sales force. He honestly got absolutely no good ideas from the teams. It seemed as if they did not try at all!

John felt totally disappointed and really pressured. There were time deadlines. The local sales force had to be trained and in the doctors' offices no later than three weeks from today. Gene Life and LMED had already purchased advertising in all of the prestigious French and International Medical and Practitioner journals. The sales calls had to be made concurrent with the appearance of the advertising. John reflected on his prior success as a manager in the United States. He had always maintained a casual management style, allowed a lot of freedom with his subordinates, encouraged new ideas, and it had served him well. He reasoned that since the French value independent thinking, they would respond well to a participative management system and would value a new sense of empowerment. Obviously, this was not the case. All he kept thinking was, "How can I get commitment from not only the regional managers but also from my own office staff?"

JOHN'S DILEMMA

From all of his past experience as well as his education, John knew that the best ideas for organizational improvement often came not from top-level management but from people performing the actual jobs. In the past, he had gotten so many wonderful training ideas from U.S. sales people. In addition, at the office in Boston, suggestions from the staff resulted in significant reductions in overhead expenses.

Something needed to be done immediately. In desperation, John again called his trusted old friend from graduate school, Michel DeVos. He shared his concern and frustration, and asked Michel for some help. Michel agreed to come to Paris the following day, and asked John to arrange a dinner meeting at Taillevent, his favorite Parisian restaurant.

Michel spoke fluent French (not Parisian French) and understood the French culture very well. After all, it was one of the two official languages of Belgium that shared the French and Dutch cultures. Michel was also familiar with the American managerial culture, as he had spent two years at an American company after his graduation from Harvard. As they spoke, Michel outlined his view of the American and French managerial culture on the back of his dinner napkin. He described the French managerial characteristics and how they were different from the American style of management.

"Management systems must reflect the cultural expectations of all the members of the organization." he said. "In the U.S. you manage in a way that fits the American managerial culture, and in France you must meet the expectations of the French managerial culture. The respective management systems aren't right or wrong, they're just different."

After dinner, John took a second look at the notes that Michel had scribbled on the large dinner napkin. He then sat at his computer and transcribed the notes into an organized table that made sense to him. The results of his transcription are contained in Table 1.

Table 1: Michel's Notes on Managerial Culture				
	American	French		
Organization	Informal, mostly egalitarian, everyone contributes equally. Organizational charts delineate activities.	Formal and hierarchical where the organizational chart defines power vested in the position.		
Communication	Direct and to the point.	Indirect and subtle.		
Thinking	Straightforward, fact orientation, minimal complexity	Circular, principal orientation, facts considered a burden		
Protocol	Not significant	Extremely important, individuals are treated according to their rank and honor		
Business Orientation	Practical and results-oriented, focus on getting the job done by any means possible.	Intellectual while maintaining a sense of logic, form counts more than results.		
Relationship Between Government & Business	Free-market mentality where the government is entrusted only to maintain competition.	Bureaucratic, where the government designed to help employees and control business		
Management Style	Participative with shared decision making.	Authoritarian and autocratic, centralized decision making		
Meetings	Strict agenda, time budgeted to cover the agenda.	Floating agenda, concurrent mini- meetings. No closure.		
Deadlines	Serious goals, not to be compromised.	Flexible, not taken very seriously.		
Character of People	Everyone focuses on individual responsibility.	Leaders are individuals, subordinates act as a group. Only the leaders are responsible.		
Historical Perspective	Focus on the present and immediate future.	Extremely historical, focus on perspectives from the past.		
Task Orientation	Tendency to do one thing at a time - resolves one and moves on to the next. Eliminate alternatives.	Multifunctional where many alternatives are explored simultaneously. Creates alternatives.		

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Table 1: Michel's Notes on Managerial Culture				
	American	French		
Risk	Risk takersthey seek success	Risk avoidersthey seek security		
Law	Adherence to rules, norms and laws.	Everyone has the right to determine if a law is reasonable and applicable to the situation.		
Order	First come, first served. Everyone takes their place in an orderly way.Patience is a virtue.	What order? Go immediately to the head of the line. It is your right. Patience is for foreigners.		

John reflected on his newly discovered knowledge of the French culture. The French have always been a very hierarchical society. The typical management style in a French company was a top-down authoritarian style, with subordinates following directions. They were not expected to participate in planning or decision-making. The French system of social democracy supported this hierarchical society, and featured similar top down government controls. From the Presidents DeGuall in the 1960's to Chirac in the 2000's the French have been led by a socialist agenda. In the early 1980's Mitterand nationalized the banks and stemmed the flow of French currency out of the country by limiting the number of French Francs that could be carried or sent abroad. The French had grown accustomed to the government-subsidized economy that extracted a heavy burden of taxes from the people and re-distributed the income to the needy. When Nicholas Sarkozy was elected President in 2007 he tried to get the French more competitive by increasing work hours, reducing social welfare benefits, but the French populace was not moved. French universities began teaching classes in English, but the basic social climate remains the same. To bring the French to a globally competitive view is no more possible than "telling a dog that they are now a cat". For the most part, President Chirac's "ancient regime" remains unchanged.

As John walked home from his office on that cold, rainy April evening he thought about everything that had transpired in the last few days. He now recognized that he was not going to be able to convert his staff to American style participative players. He needed to modify his management style to accommodate the culture. The question was how? How does he manage in a way that is consistent with the cultural expectations, and get things done?

His route along the quai brought him past the Isle St. Louis, where he looked ahead through the cool mist at the magnificent Cathedral de Notre Dame. He was awed by the ghostly apparition, but was too frustrated to completely enjoy it. In his frustration he exclaimed aloud, "What should I do now?"

CASHLESS AT PAYDAY: FINANCIAL AND ETHICAL DILEMMAS OF CASH ADVANCES

Anne Macy, West Texas A&M University

CASE DESCRIPTION

The primary subject matter of this case is payday loans, which are cash advances on a customer's next paycheck. Payday loans are a large segment of the subprime lending industry. Students examine the industry model, characteristics of payday loans and the people who use them, along with alternatives to payday loans while they calculate the benefits and costs of the various options. Secondary issues include the effect of a bad credit score on a person's ability to obtain credit and employment and along with reasons why people don't use banks. Finally, students discuss the ethical nature of bank fees and payday loan charges. The case has a difficulty level of three and is designed to be taught in one class period. The case should require one to two hours of outside preparation by students.

CASE SYNOPSIS

This case examines the process, costs and alternatives of payday loans. Payday loans are cash advances against the next paycheck. Payday loans constitute a \$45 billion business and cater to individuals who are temporarily short on cash, such as college students. Many college students do not understand the true cost of payday loans while others believe it is their only option. The customer must have a checking account and a steady job. Typically, the individual does not have access to a credit card or other means for a cash advance. Students, in the role of Steve, examine the payday loan taken by Scott, Steve's brother. Steve also investigates the industry to learn how payday loans work along with an examination of the viability and cost of alternative sources of cash. During the evaluation process, students calculate the annual percentage rate of the loan and of alternative sources for the money. Furthermore, students discuss the ethical issues regarding payday loans and other alternative sources of quick cash including bank fees and credit cards.

THE FOOTBALL GAME

The phone rings. Steve fumbles for the phone. He is greeted by a gruff voice. It is his brother Scott. Scott wants to know where the pizza is. Steve mumbles back that he is still asleep. Scott tells him that he as already missed the kickoff. Steve didn't realize it was so late. He drags

himself out of bed. Steve quickly dresses, calls for carryout, and gets on his way. He makes it to Scott's house by the second quarter. The two brothers sit on the couch and discuss the team's chances for the playoffs. The first half ends well. There are no injuries.

During the game, Scott tells Steve that the transmission on his car is not working again. It is going to cost over \$300 to get it fixed. Scott asks Steve if he would be willing to drive him to and from work for the next week or two.

QUICK CASH

Steve picks up his brother after work. Scott gives Steve directions to a payday loan store. Steve has never been here so he follows Scott inside. Scott tells the clerk that he needs \$400. He gives the clerk his pay stub and employer's phone number. The clerk disappears into the back room. He reappears a minute later and tells Scott that he can have the \$400. He needs to write a check for \$480. The payday loan store will cash his check in fourteen days. The clerk hands Scott the \$400.

Once in the car, Steve asks Scott about the loan. He remarks that eighty dollars seems like a lot of interest. Plus, the amount is more than the \$300 Scott needs for the car. Scott replies that he thinks the car will cost more to fix and that he needs some cash for gas and food. Scott knows that it is expensive but it is better than an overdraft on his checking account. The money in the checking account needs to go for his utility and telephone bills. Besides, he doesn't have anywhere else to turn. He tried to go to the bank but they were not helpful and made him feel uncomfortable. He has already borrowed money from his friends and their mom and can't ask for more. Scott already owns Steve a \$100. Steve wonders aloud if their mom would give Scott a little bit more. Scott replies that he already owes her \$1,000 from when he had to go to the emergency room last year. Scott tells Steve that he knows the payday loan is expensive but he doesn't have any other option.

After dropping off Scott, Steve decides to investigate whether his brother has any options or not.

BANKING ON CASH

Steve stops off at the bank to see what the options are. He knows Mrs. Talbot from when they lived on the same street. He asks if she can give him some alternatives to a payday loan. Steve questions whether a payday loan is less expensive than an overdraft on a checking account.

Mrs. Talbot invites Steve into her office so they can talk more privately. She doesn't like to talk about overdrafts and payday loans in the bank lobby. She begins to go over the costs of an overdraft. An overdraft has several costs. First, there is the explicit cost from the bank. This bank charges \$30 per overdraft, which is the average nationwide charge. Mrs. Talbot points out that many banks will lower the cost of the first overdraft to \$20 but raise the cost on subsequent overdrafts to

\$35 each. The lower cost on the first draft is because some people just make errors and this a way to not offend a normally good customer.

The merchant will also charge an overdraft amount. It varies widely among merchants but most fall into the range of \$25 to \$35. If the merchant turns the overdraft over to a collection agency, they also charge a fee, usually around \$35.

Steve is surprised to learn that the fees are charged no matter the amount of the overdraft. It doesn't matter if the debit is for \$15 or \$115, the fees are the same. Mrs. Talbot also reveals that most banks clear charges based on size. Thus, the largest debit is cleared first followed by the second largest and all the way down to the smallest. For a person who overdrafts, this can cause fees to increase because the person may overdraft on more than one debit. For example, a customer has \$100 in his account and he has two debits, one for \$15 and one for \$125. The bank will clear the \$125 debit first. Because the account does not have enough to cover the larger debit, the account is overdraft on both debits. If the bank had instead posted the smaller debit first, the customer would only have an overdraft on the larger debit. The \$15 debit will cost over \$50 in fees and more likely \$60 in fees.

Mrs. Talbot said that it is not unusual for someone to not realize that they are low on their account and overdraft several times in one day. Now that people use debit cards, it is a \$30 charge for each swipe. A person might be out and get a soda at McDonald's for a \$1 and get a \$30 charge for that swipe. Later the individual might get some food, another \$30 charge. This will go on all day until the person checks the account balance. Thus, some people will run errands and end up with several hundred dollars in overdraft charges for that one day. The bank won't remove them or consolidate them. It can really add up.

Steve is shocked at how the penalties for a mistake and asks about overdraft protection, which he has on his checking account. Overdraft protection means that the bank pays the merchant for the customer but the bank still charges the customer the insufficient funds charge. In addition, banks will charge a daily amount until the funds are replaced. The usual daily amount is \$5. The benefit is that the customer avoids the merchant charge and basically has a few extra days to come up with the amount. Plus, he avoids the stigma of insufficient funds with the merchant. However, he still owes the bank the charges.

Mrs. Talbot points out that some people became lazy with the overdraft protection and overused it. Most banks have a limit of overdraft protection, usually around \$300 to \$500, so a person can run into that limit as well. If the customer goes over the limit, the customer has to pay the fees to the merchants on those overdrafts.

Because so many customers have insufficient funds, banks have added other alternatives. The alternatives only exist for customers who have the funds to pay off the overdraft or who have an established banking relationship. For a \$5 transfer fee, a customer can link the checking account to a savings account. When there is an overdraft, the bank just pulls the money out of the savings account and puts it in the checking account.

Customers with good credit can get a line of credit approved. When there is an insufficient charge, the bank covers the amount with a draw on the line of credit. A link to a line of credit usually costs around \$15 for the annual fee and interest of 12%. The line of credit can be used throughout the year for the same \$15 fee, not a \$15 fee each time it is used. Plus, there are no overdraft charges. The customer pays off the line when he has the money. Mrs. Talbot says that many small businesses use this as do families where several people are using the same account and may not be aware of each other's payments.

For those customers with a credit card from the bank, the bank can pay the insufficient charge with a cash advance on the credit card. The usual cost is \$3 plus the interest cost at 18% for the cash advance and the insufficient funds charges are avoided. The minimum total fee for the cash advance is \$15.

He thanks Mrs. Talbot for her help. While he is surprised at all the fees associated with insufficient funds but it is an alternative to a payday loan. Some of the other choices from the bank might be cheaper. Steve uses that bank because it has free checking. But now he wonders how free it really is.

CASH AND CREDIT

As Steve heads home, he sees a billboard for a credit card. He wonders if a credit card would be a better choice. At his house, he hunts around for his last credit card bill. He could get a cash advance at 22% a year annual percentage rate. He also notices that if his payment is late, like it might be for Scott, he is charged a late fee on top of the interest. For \$400, the late fee is \$50.

Then it dawns on Steve. Why doesn't his brother just use the credit card to pay the bills? The rate must be lower. Steve quickly calls Scott and asks about using a credit card. Steve tells Scott that the credit card rates start at 15% and 22% on a cash advance and go up. It is still expensive but a lot cheaper than the payday loan.

Scott informs Steve that he doesn't have a credit card. He did have one but he got behind in the payments he almost had to declare bankruptcy. He was finally able to pay if off by working a couple of extra jobs and living at home for a year. After that experience, Scott decided to stay on an all cash basis. If he declared bankruptcy, he could lose his job as security at the government facility. He didn't want to lose that job because of the health care benefits.

Scott asks Steve if he would be willing to put the charge on his credit card. Steve hesitates but declines. If Steve really is having this much of a cash flow problem, he wonders how he will be repaid. Besides, Steve has to pay tuition and fees along with buying books for the upcoming semester. He doesn't have any extra money.

CREDIT UNIONS

After Steve drops off Scott at his job the next day, Steve notices that there is a credit union across the street from the government facility where Scott works. Steve decides to stop by and see what alternatives it has for Scott.

Steve asks to see a new customer representative. He inquires if it is possible to get a small loan. The representative replies that it depends upon your credit rating. Steve asks if there are any options for people without a good rating as he explains the situation.

The credit union officer points out that credit unions operate a lot like banks. However, because it is a cooperative agreement among the members instead of a for-profit venture like a bank, the credit union can offer lower rates on loans than banks. The loans are good alternatives to using a credit card. However, the person has to have the ability to pay back the loan. Credit unions do not have the resources to have large loan write offs.

While the credit union doesn't seem to be a good choice for Scott right now, the officer does point out that if Scott were able to get save \$400 dollars, the credit union could loan him that amount. Because the loan is fully collateralized, the rate is can be about two percent less than a credit card rate. The more collateral and better credit rating the customer has, the lower the rate will be. The customer makes a monthly payment and the loan is usually for several months to a year. The loan is for people who have an income but can't always meet their bills.

Because of the increase in payday lending, some credit unions are not offering their own version of a payday loan but at a lower interest rate and with 50 days to repay.

VISIT TO SCHOOL

Steve stops by his advisor's office to finalize his schedule. He tells the professor about his brother's situation and about all of the places Steve has visited trying to find options for his brother.

After reassuring the professor that he wouldn't lend his brother the money, Steve was surprised to learn that his advisor knew all about payday loans. The professor is on a university committee that looks at the financial stresses on its students. Many students quit school because of financial pressures. It is not uncommon for undergraduate students to have a credit card balance and overdraft on their checking account in addition to having car and education loans. Now that a payday loan store has opened across the street from the student union, the university is worried that even more students will get into financial distress.

The professor shares some statistics that he has gathered from the Center for Responsible Lending (2008). Payday loans are a \$45 billion business. The average loan ranges from \$300 to \$400 dollars and the average loan is rolled over four times. Actually, sixty percent of loans go to borrowers who will do more than twelve loans in a year while twenty-four percent of loans are to

borrowers who will do over twenty loans in a year. It is not uncommon for a payday loan to have an annual percentage rate of over 1000%.

Steve is astonished at these figures. He asks how a person can pay off the loan. The professor responds that this is why so many are rolled over. If the borrower doesn't roll the loan over, the payday loan store turns the check over to the district attorney's office to collect because the person passed a bad check. The customer has to pay the insufficient funds fees on top of the interest and fees for the payday loan.

Because repayment is such a problem, the payday loans store are now having customers give the store the right to draft from the bank account directly. There are no checks. The payday loan store drafts the amount out at the end of the loan, which has increased the loan stores loan recovery rate. Because the store wants you to be debt, it encourages its customers to continually roll over the loans, with added fees. If the person isn't able to even make the interest payment, usually about \$20 per \$100 borrowed, the interest is added into the payday loan. Thus, the amount of the loan is continually increasing. The borrowers can be pulled into a spiral of debt.

The professor asks Steve if he can remember his time value of money from finance. Steve smiles and hesitates. The professor asks what happens to the amount that the borrower owes if the loan amount increases, the repayment period is short and compounding on the loan increases. Steve replies that the debt and interest owed increase and would continue to increase until the loan is paid. The professor answers that this is the business model of payday loan stores. Many payday loans stores are now targeting those people with steady checks from the government such as senior citizens. It is not uncommon to see payday loan stores right across the street from a retirement village. Some stores are even getting the elderly to give the right to draft the Social Security check each month to the store.

The professor asks Steve if he can tell him where many of the payday loan stores are. Steve replies that they are in the lower socioeconomic areas of town and near the factories. They tend to be in strip malls on major roads. Near the university, there is the payday loan store by the student union, one by the dorms and another by the group of apartment complexes just off of campus.

The professor is nodding his head. Payday loan stores are also called cash advance stores. They are located near where people live and work who are more likely to run out of cash and need some quickly. It doesn't take much capital for a store. The lease and operating costs for the small square footage in a strip mall runs about \$50,000 on average nationwide. If the store starts with loanable funds of \$50,000, the total initial investment is \$100,000 (Lauder, 2008). If the store charges \$20 per \$100 loaned, it doesn't take long to earn a profit.

The loans are so expensive that the U.S. government has limited the annual interest rate that can be charged to members of the military to 36%. States have even limited the interest rate and many payday loan stores have left those states. The top rate varies by state but Arkansas, New Hampshire, Oregon, Connecticut, Georgia, Maine, Maryland, Massachusetts, New Jersey, new York, North Carolina, Ohio, Pennsylvania, Vermont, West Virginia and the District of Columbia

have all sent two-digit interest rate caps. The typical cap is between 28% and 36% for the annual percentage rate.

The professor points out that for many of the borrowers, they needed cash quickly and didn't have the credit rating to get a short-term loan. Thus, they had to turn to something more expensive. Two other alternatives are pawn shops and car title lenders. With pawn shops, the person has to have something of value while with car title lenders, the person must give up the car. For people needing cash advance, they have already sold everything that has value and they need their car for work so they can try to pay off the loan. Payday loan stores are used after all other avenues have been exhausted. Friends and family won't loan any more money.

Steve asks why the government doesn't do anything about it. The professor points out that many states have put in interest rate caps. However, there is a belief that the people who get into debt and have problems are in this situation because of poor decisions and poor money management skills. This might be the case or it might be that the people have had a bad run of luck. Additionally, because the amount of the loan is usually only a few hundred dollars, many middle-class people have a hard time believing that someone would go into debt over that amount. It just seems too small for them. However, since the payday loan industry is over \$45 billion in size, there certainly is a demand for quick cash.

The professor encourages Steve to check his credit history and make sure that he is doing everything he can for a good rating. Steve asks what he can do to get a good score. While there are various credit scoring companies and each have their own method, the average weightings are as follows:

- 1. 35% based on payment history
- 2. 30% based on amounts owed and the balance to credit limit ratio
- 3. 15% based on length of credit history
- 4. 10% based on type of credit used
- 5. 10% based on new credit

Steve leaves the professor's office feeling a bit worried. He seems to have more questions than answers. Payday loans are so expensive but does his brother have a better option?

FEDERAL RESERVE DILEMMA: 1974

Mark Tuttle, Sam Houston State University Robert Stretcher, Sam Houston State University

CASE DESCRIPTION

The primary subject matter of this case concerns the dilemma facing the Federal Reserve in the mid 1970s when inflation and unemployment were reaching high levels simultaneously. From a historical perspective, the levels of both inflation and unemployment were reaching post war record highs. Secondary issues examined include arguments about proper policies from a variety of economic modeling perspectives. This case has a difficulty level appropriate for upper-level undergraduate courses and perhaps first year masters' level courses, depending on prior monetary economics background of the student population. The case is designed to be taught in one class period and should require two hours of outside preparation by students.

CASE SYNOPSIS

The mid 1970s experienced a variety of economically profound events. Among these were post Vietnam volatility in U.S. markets, oil price shocks, economically questionable fiscal policies, middle-east unrest, and a period of high unemployment combined with high inflation, confounding the conventional economic wisdom of the day. This case presents background, data and commentary concerning this period, and tasks the reader with deriving "appropriate" policy responses by the Federal Reserve. Readers must discern the uniqueness of the situation from past history, reconcile conflicting policies that had been pursued in the past, either targeting high inflation or high unemployment (not both at the same time), and deal with policy prescriptions that differed among various policy objectives.

INTRODUCTION

The U.S. macroeconomy was considered relatively healthy at the end of 1973, but some problems loomed. Growth of real output was robust and the unemployment rate was on the decline. By the fourth quarter of 1973, the U.S. was enjoying significant growth in Gross Domestic Product (GDP), growing at an annualized rate of 3.9 percent in the fourth quarter. In fact, real output had increased in thirteen of the fifteen quarters following the 1969 - 1970 recession, which ended in the first quarter of 1970.

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It certainly wasn't the longest expansion following World War Two. Yet, real GDP had grown at an average annual rate of 4.8 percent, which exceeded average real GDP growth of 3.9 percent following the Second World War. National unemployment rates fell as the real GDP grew. Unemployment reached a forty-two month low of 4.6 percent in October, 1973. This rate was down substantially from the post-recession high of 6.1 percent during the summer of 1971.

The positive increase in real output fueled a faster rate of increase in prices. Inflation had decreased following the 1969 – 1970 recession, and reached a low of 4.5 percent in 1972. However, inflation rose through 1973 (measured as the percentage change in prices for Gross Domestic Purchases), averaging 5.8 percent. A higher rate of growth in the money supply contributed to higher inflation rates. Additionally, M2 (one measure of the money supply) increased 13.4 percent in 1971, almost double the average annual rate of growth for the 1959 through 1970 period. This high rate of money growth was sustained through 1972, increasing 12.9 percent in that year. Consumers to a large extent bore the cost of these price increases. One measure of consumer prices, the Consumer Price Index (CPI), grew 8.9 percent in 1973. Therefore, inflation became a considerable concern at the end of 1973.

POLITICAL INSTABILITY

Political instability in the U.S. and abroad complicated the situation in late 1973. President Nixon was battling for his political life over the Watergate scandal. As a result, active fiscal policy waned and monetary policy became the primary means to alter the short run path of the macroeconomy. The U.S. began the withdrawal of all combat troops from South Vietnam in 1973. One side-effect of reduced involvement in Vietnam was a reduction in the budget deficit as defense spending fell. The lessening of fiscal stimulus aided in cooling aggregate demand during 1973.

International instability followed the domestic political instability and the withdrawal from Vietnam. Egypt and Syria attacked Israel on October 6, 1973, the day of Yom Kippur. Initial Arab gains were reversed after two days of fighting. By the time the U.N. cease-fire went into effect on October 24, the Israelis were driving towards Damascus and Cairo. The U.S. fully supported Israel during this conflict, which infuriated the Arab nations that supported Egypt and Syria. During October, 1973, these Arab members of the Organization of the Petroleum Exporting Countries (OPEC) initiated an oil embargo against the countries that supported Israel. As a result, energy prices in the U.S. soared. Prices paid by the consumer for energy rose 7.6 percent in the last two months of 1973 (an annualized rate of 55.6 percent). This supply shock rippled through the U.S. as suppliers' marginal costs (especially for energy inputs) increased at the end of 1973.

WEAKENING AGGREGATE DEMAND

Despite the strong growth in real output, there were signs of weakening aggregate demand. Business fixed investment growth was anemic by the end of 1973 due to rising interest rates. By the end of that year, the Aaa bond rate rose sixty basis points to 7.68 percent in December and the yield on the ten-year treasury was nearly seven percent (a rise of thirty-eight basis points). Even more alarming was the change in short-term interest rates. The three-month treasury yield rose an astonishing 238 basis points over the year, and the yield of 7.45 percent by the end of 1973 was seventy-one basis points greater than the long-term treasury yield. The yield curve inversion convinced bond market participants to expect higher inflation in the short run relative to the long run. Mortgage rates were also rising substantially. The rate on thirty-year mortgages increased from 7.44% at the end of 1972 to 8.54% by the end of 1973. The side-effect of the mortgage interest rate rise was a decline in residential investment during 1973.

Another sign of slumping aggregate demand was the drop in real consumer spending. Real personal consumption expenditure growth was strong through 1972 at 6.1 percent. For 1973, the change in consumer expenditures was 4.9 percent. However, most of this change came in the first quarter. During the last three quarters of 1973, real consumer spending was stagnant, rising 0.01 percent - consumers were reducing spending on durable and nondurable purchases. One contributing factor to this fall in spending was the decline in the growth of household wealth. During 1971 and 1972, real household wealth grew at an average annual rate of 7.2 percent, which helped to fuel consumption and aggregate demand. By 1973, however, real wealth grew 3.0 percent.

The health of the U.S. macroeconomy was certainly questionable at the start of 1974. The U.S. had experienced exceptional growth in real output in the years following the 1970 recession, but the growth was slowing. One reason was declining aggregate demand. Rising interest rates and falling household wealth softened business and household spending, respectively. The end of the Vietnam War and rising tax revenues reduced the budget deficit, therefore reducing fiscal stimulus on aggregate demand. On the supply side, the oil embargo increased energy costs, which raised marginal costs and reduced aggregate supply. Unemployment was low, but the potential for a weakening economy suggested that the reductions in unemployment were potentially at an end.

EXHIBITS

Table 1 provides several macroeconomic variables mentioned in this case.

Table 1: Important Macroeconomic Variables Provided to Students(Dollar Values in billions)			
Variable	1972	1973	1974
Real GDP growth	5.3%	5.8%	-0.5%
Inflation [CPI (1982-1984=100)]	3.4%	8.9%	12.1%
Inflation [Core CPI (1982-1984=100)]	3.0%	4.7%	11.3%
Inflation (Percentage Change in Price Index for Gross Domestic Purchases (2000=100))	4.5%	5.8%	10.2%
Real Household Wealth growth	11.3%	8.6%	0.8%
Real Household Real Estate Wealth growth	8.3%	8.8%	-5.8%
Ten-Year Treasury Rate	6.21%	6.84%	7.56%
Three-Month Treasury Rate	4.07%	7.03%	7.83%
Corporate Aaa Rate	7.2%	7.4%	8.6%
Unemployment Rate	5.6%	4.9%	5.6%
Net Federal Government Savings (Billions \$)	-24.4	-11.3	-13.8
Source: Wealth data provided by the Board of Governors of the Federal Reserve System. All other data is provided by the Federal Reserve Bank of St. Louis.			

ACTIVE INSURANCE, INC.

John Leaptrott, Georgia Southern University J. Michael McDonald, Georgia Southern University William McCartney, Georgia Southern University

CASE DESCRIPTION:

The primary subject matter of this case is strategic management and the organizational decisions related to growth in small businesses. Secondary issues examined include: selecting a growth strategy (internal growth vs. external options); organization culture issues; and the implementation of competitive (focused differentiation) and functional strategies in a service organization. The case has a difficulty level appropriate for junior/senior business students who have completed business core requirements. The course would also be appropriate for graduate business students at the master degree level. The case is designed to be taught in one class hour and is expected to require approximately one hour of outside preparation by students.

CASE SYNOPSIS:

Jeff Ryan, owner of Active Insurance, Inc., faces an important decision concerning the future growth of his business. Ward Stevens, the owner of Ward Stevens Insurance agency, is considering retirement has talked to several individuals, including Jeff, about acquiring his company. Jeff has discussed the possible acquisition with his accountant and together they have several concerns about the potential transaction.

Jeff's primary concern is the difference in the business models used by the two companies. Jeff started Active Insurance ten years ago and the agency has grown steadily to the point that it currently employs fifteen agents. Jeff has worked hard to make Active Insurance a customer-oriented firm and has established policies that make it easy for customers to visit his office and to access products and services. Additionally, Jeff uses agency management software and has implemented several innovative personnel policies that he believes are key to his success. Jeff is committed to training and development and is proud of the fact that he has taken a progressive approach to managing his business.

In contrast, the Stevens agency is a more traditional, slow changing company. The company is well established, with eighteen agents who operate with a great deal of autonomy. However, the agency has not grown materially for a number of years. Mr. Stevens has not updated his operational or personnel practices since he started the firm and does not get involved in the day-to-day functions of the agency. Customer service, employee training and outside financial advisors all receive low priority from Mr. Stevens. His management philosophy is "if it isn't broke, don't fix it".

So Jeff has to decide. Does he make the acquisition and deal with the operational and cultural differences in the two firms or does he forget the acquisition and focus on internal growth?

INTRODUCTION

As he drove back to his office, Jeff Ryan was thinking about the meeting he just had with Duane Early, his C.P.A. and trusted business advisor. In the meeting they discussed Jeff's efforts to negotiate the purchase of Ward Stevens Insurance, Inc., an independent insurance agency located about an hour away. Mr. Stevens was seriously considering retirement and was talking with several other independent insurance agency owners about acquiring his agency. Jeff had started Active Insurance, Inc. in Dragitville ten years ago and led its growth to its current position as one of the leading independent insurance agencies in the area. Active Insurance currently employed fifteen agents and had grown at an annual rate of 10-20% per year over the last five years.

Jeff Ryan had begun his career as an agent of a major full line property and casualty insurer immediately after graduation from college. He soon realized that, while serving the consumer marketplace was a significant market segment for many property and casualty agents, serving the commercial marketplace was also a very lucrative opportunity that most agents chose to pursue. However, his former employer specialized in providing insurance to consumers, but did not provide insurance to businesses. This meant their agents had to work through large insurance brokers that were not affiliated with the company in order to provide commercial insurance coverage. Since Jeff had the opportunity to work with many large insurance brokerages in the course of writing commercial insurance policies, he was able to observe the strengths and weaknesses of these companies firsthand. The lessons learned from this early experience would later form the basis of his business model for Active Insurance, Inc.

THE BUSINESS MODEL

One of the elements of Jeff's business model was to provide excellent customer service. While excellent customer service can be provided in many ways, Jeff chose first to focus on making it as easy as possible for customers to do business with the agency. Although the agency was located in a modest office building a few blocks off a major roadway, the area was very accessible by several other major roads. This location made it extremely convenient for their clients to visit the agency's office. In addition, the office location provided ample parking and easy access for customers with disabilities.

Realizing that many customers work during regular business hours, he scheduled agents to be available in the office during the early evening and on Saturdays. He felt this action was

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particularly necessary to properly serve new customers. Rather than simply issuing an individual policy over the phone in response to an initial phone call by a new customer to one of the agency administrative staff, the agency required that every new customer schedule an appointment and meet with an agent in person. Agents could submit their availability in advance for these meetings and would be assigned new accounts by the clerical staff on a rotating basis based on availability. The agent would use a new client checklist developed by the agency as a tool to review the risks and policy coverage during this initial meeting. The agent received a sales commission for any policies the new customer decided to buy and was responsible for servicing this customer after the meeting. The servicing agent also received commissions on policy renewals. Past experience had shown that many customers were unaware of insurance coverage options, discounts for multiple policies and the existence of other insurable risks. Jeff received considerable positive feedback from customers regarding these business practices. In addition, he attributed the agency's higher than average customer retention rate to the strength of the agent-customer relationships that began during those initial meetings.

This continuing relationship with the agent was nurtured by providing the customer with the e-mail addresses of their assigned agent so that they could communicate with the agent at a time convenient for them to do so. Customers could also request insurance documents be sent by both regular mail and as an e-mail attachment. This gave the customers the ability to store these attachments electronically so that the documents could be immediately accessed by multiple computers at numerous locations if necessary. As technology evolved, Jeff strove to refine the company website to make it as customer friendly as possible. The company website currently provided information on all the insurance carriers it represents, a biography of all of the agents, a brief history of the agency, a description of new customer procedures.

PERSONNEL MANAGEMENT

Jeff felt that the selection and training of agents was another key component of achieving superior customer service. For many years life insurance companies had used pre-employment testing to identify those job candidates that were most likely to succeed. He himself had to take a battery of tests prior to being hired as an agent early in his career. He recently enlisted the assistance of a human resource manager, employed at a company his agency insured, to administer commonly available general mental ability and integrity tests to his agents. The test results were then compared to the results to the amount of their commission income for the last fiscal year and their rate of commission growth for the last three years. The comparison showed a positive relationship between general mental ability and the integrity trait of conscientiousness with both income and income growth. As a result, all new agent job candidates were now required to take both tests as a screening method before they could proceed to the interview phase of the selection process. During the final phase of the selection process, each candidate participated in a structured interview conducted by

Jeff and his two most senior agents. In this interview the three panelists asked each candidate the same questions that were designed to assess the level of conscientiousness, relevant industry experience and the degree to which each candidate possessed the personality traits of agreeableness and emotional stability. Once a candidate was hired to be an agent, they were considered probationary for a ninety day period. They were required to accompany each non-probationary agent on at least one sales call or initial client interview. Once this initial training was completed, Jeff would then accompany the new agent on a sufficient number of sales calls or new client interviews to insure that the new agent understood the agency procedures and the underlying differentiation strategy that formed the basis of those procedures.

Jeff required all agents to sign non-compete agreements prior to being employed. These agreements provided that if agents left employment with the agency and continued serving customers of the agency the agents agreed to repay fifty percent of the commissions they had previously earned serving those customers. As a practical matter, customers often preferred to continue their relationship with an agent regardless of their agency affiliation and this arrangement partially compensated Jeff for the agency's expenses related to acquiring the customer and costs incurred in servicing the customer over the course of the relationship.

Active Insurance, Inc. utilized comprehensive insurance agency management software to track customer insurance coverage. This software package tracked forthcoming policy expiration dates, new policy productivity and rates of policy renewal for each agent and volume by each underwriting insurance company as well as other pertinent data. Agents were compensated based on a commission splitting arrangement under which the portion of the commission earned by the agent rapidly increased as their commission volume increased. The variable commission splitting arrangement provided a substantial incentive for agents to reach high levels of performance. The variable commission structure also helped the agency better cover the overhead costs attributable to agents that produced substantially less commission income and more quickly recover the recruitment and training costs of new agents. Jeff routinely conducted biweekly sales meeting where he shared new information regarding the underwriting insurance carriers, productivity information for each agent in the form of year-to-date charts and provided agents a chance to share their positive and negative experiences since the prior meeting. The agency encouraged agents to attend training sessions offered by both insurance companies and other industry sources and reimbursed them for their expenses incurred in this training.

Another component of customer service was putting a high priority on making all communications with the customer as efficient and professional as possible. All incoming calls were answered by the receptionist and not subjected to a voicemail system. Jeff realized that the persons who created the first impressions of agency were the receptionists and the customer service representatives (CSR). Rather than making the receptionist's job an entry-level position, he chose to designate that position as the top clerical position. The entry level of the clerical hierarchy was the assistant customer service representative. The next level was that of CSR with the best individual

performer being given the position of receptionist. This resulted in the customer interacting with an extremely knowledgeable person who could efficiently assess how the customer could best be served and then rout them to the appropriate person in the agency. Candidates seeking to join the clerical staff were subjected to the same screening tests as agents. The structured interview was conducted with a panel consisting of Jeff, a senior CSR and a senior agent. Each newly hired assistant CSR spent a few days with each senior CSR before receiving his or her permanent assignment.

The agency utilized general accounting software that allowed the agency's in house bookkeeper to journalize routine accounting transactions and submit the transaction files by E-mail to the agency's local CPA firm that then made whatever general ledger adjustments were necessary and prepared quarterly financial statements. Once the statements were prepared Jeff would meet with Duane Early, the partner in the CPA firm in charge of providing services to the agency. Duane also provided advice to Jeff regarding his other business interests and prepared Jeff's personal income tax return. Jeff's relationship with Duane began during Jeff's planning activities in anticipation of starting the agency. Jeff had sought referrals from his banker, attorney and other agency owners he had met at continuing education events. He sought a CPA that had already developed expertise in dealing with insurance agencies and Duane was one of three CPAs that had been recommended by most of the referral sources. Jeff met with all three CPAs and felt that Duane provided the best fit for his agency based on his ideas for providing useful information related to typical decisions that would need to be made in growing the agency.

While Jeff had initially thought that Duane's firm should prepare audited financial statements in accordance with generally accepted accounting principles (GAAP), Duane explained that ethical requirements precluded his firm from providing both management advice and auditing services. He instead recommended that, in order to save accounting fees, Jeff should request compilation statements that were prepared on the tax basis. The preparation of these types of financial statements was permissible as an other comprehensive basis of accounting (OCBOA) financial statement. Duane's firm could provide management advice and prepare these types of statements as long as the accountant's report accompanying the statements disclosed that the accounting firm was not independent with respect to the insurance agency. Because Jeff personally guaranteed the repayment of the insurance agency's operating line with the bank, the bank was willing to accept an OCBOA compilation statement and did not require a reviewed or audited statement prepared in accordance with GAAP.

Jeff also consulted with Duane prior to making major financial or strategic decisions. Additionally, if the decision were related to the normal operations of the agency Jeff would also hold one or more meetings with his senior agents to discuss the decision, and evaluate alternative approaches. Jeff felt this consultation process generally resulted in better decisions because he would receive additional information or be exposed to other perspectives that had not occurred to him. He was very proud of the progressive manner in which he had defined the competitive strategy of his agency and configured the various elements of his agency to execute that strategy. This configuration included implementation of a personnel recruitment program designed to identify individuals that would likely be successful in pursuit of that strategy and a training program designed to improve the necessary related skills of both new and existing employees. He had also established comprehensive control procedures for assessing the agency's performance. Jeff felt that by configuring the organization in this manner, the operations of the agency were well designed to facilitate the development of a long-term relationship with the customer.

WARD STEPHENS INSURANCE, INC.

Ward Stevens Insurance, Inc. was well established in its marketplace. It had been operating for over thirty years. However, the customer base, while substantial, had not increased materially for a number of years. The agency employed 18 agents, slightly larger than the 15 agents employed by Active Insurance. Most of the agents employed by Ward Stephens had been with the agency for between 15 and 25 years. This was in contrast to the 5 to 10 years average for the agents of the Active Insurance, Inc. The Stevens agency agents acted with great autonomy. Mr. Stephens rarely held sales meetings and generally did not get involved with the day-to-day functions of the agency. He viewed his role as a "goodwill ambassador" to the community, a role that resulted in people being introduced to the agency and, in some cases, resulted in them becoming customers.

The agency was still located in its original location. While the location was close to most residential areas in the early days of the agency's operations, subsequent relocation of the population to outlying areas and industrial development of the area immediately surrounding the agency had resulted in it being somewhat inconvenient to access. As a result, few customers chose to actually visit the agency, preferring to conduct business by phone. The agency regularly employed recent high school graduates at minimum wage to serve as receptionists for the few customers that chose to visit the agency and utilized a standard voice mail automated phone system to route incoming calls.

Agents would be involved in helping their customers with their insurance needs. However, new customers that were not already being served by an agent were routed to a CSR that would get their information and issue them a policy. The agency would not pay agent commissions on these customer policies. Because Mr. Stephens and many of the senior agents were comfortable with the longstanding procedures of the agency, the agency still transmitted renewal notices and policy information solely by regular mail and had only minimally used the Internet in their business operations. The agency had an informational website that included information about the history of the agency, location, hours of operation and contact phone numbers for the agents. E-mail addresses for individual agents were not disclosed.

All personnel hiring and firing was done solely by Mr. Stephens. The process had not changed since the agency started. He would have one of the clerical staff put a help wanted ad in the local newspaper. After the closing date stated in the ad he would sift through the responses and bring

the individual he thought was the best fit for the position in for an interview. If the interview were satisfactory he would hire the individual. He was somewhat traditional in his attitude towards training. He noted that nobody had to train him and that the "sink or swim" method should be applied to new hires. He was fairly happy with his agents over the years, which he in part attributed to his personnel management skills. When it came to managing people he was satisfied with his "system" and believed in the old adage "if it isn't broken, don't fix it."

Mr. Stephens employed a bookkeeper that had been with the agency for 20 years. Although her accounting capabilities were somewhat limited, she was a very loyal and dedicated employee that took a genuine personal interest in her coworkers. She could be counted on to organize agency events and to help out in whatever way she could. Her primary function was to calculate the payroll every two weeks and to manage the agency checkbooks. She would bring the checkbooks to the agency's CPA firm at the end of the year and the firm would prepare the tax return. Mr. Stephens did not see the benefit in having the firm prepare financial statements at either the year-end or an interim basis. If the agency's checkbook balances were adequate and he was able to take what he considered to be a sufficient salary he assumed that the agency was operating correctly. He was somewhat uncomfortable in dealing with accounting matters and felt that the fees charged by accounting firms were quite high. Consequently, he usually only met with the accountants when he brought in the information needed in the preparation of his personal tax return.

While Ward Stephens Insurance, Inc was not nearly as progressive in their management policies as Active Insurance, Inc., the agency had achieved a reasonable degree of success. Mr. Stephens had mixed emotions about selling the agency. The last thirty years had been very rewarding to him and to most of his agents. He had quietly put out a few feelers with up and coming agencies such as Active Insurance and had met a handful of prospective buyers in addition to Jeff. He wondered if someone actually did agree to his price and terms whether he could he actually sell the agency. He knew he wasn't getting any younger and he would like to retire and move to Florida while he was young enough to enjoy the outdoor activities. He just didn't know if this was the right time to do so.

ANALYZING THE PURCHASE DECISION

As Jeff entered Duane Early's conference room to discuss whether or not to purchase the Ward Stephen's agency, he was looking forward to receiving Duane's assistance in helping him reach an objective rather than intuitive or emotionally driven decision. Jeff frequently discussed important agency decisions with Duane. On most occasions, Duane's expertise in accounting and financing complemented Jeff's management and marketing expertise and resulted in a well thought out decision. On other occasions, merely having to explain the decision to Duane helped Jeff organize his thoughts and facilitated his decision-making process. The discussion began with Duane's request for a report on Jeff's most recent meeting with Mr. Stephens:

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Duane:	Jeff, tell me about your last meeting with Mr. Stephens.
Jeff:	Well, as his target retirement date approaches, he is anxious to complete the purchase of his agency. He is really pressing me for a decision.
Duane:	One of the reasons you chose our accounting firm was our experience with independent insurance agency clients. From my perspective you have done an excellent job of differentiating your agency from the others by employing very progressive management practices. The Stephens agency is a bit old fashioned. Are you sure it would be a good fit for your agency?
Jeff:	That is a really difficult question. As you know I would be paying the market value of the agency based on their current commission income levels. I am convinced that by employing my progressive management procedures in that old fashioned firm I could substantially increase commission income in the short term.
Duane:	I am sure those kinds of changes would be welcomed by the customers, but I am not sure the culture of that agency can handle that degree of change. How do you think commission income will be affected if you do buy the agency and have to replace most of the personnel? I would expect that a lot of the customers have pretty strong business relationships with individual agents that have developed over the years. Did you know if the agents signed a non-compete agreement when they were hired?
Jeff:	Mr. Stephens doesn't believe in having his agents sign non-compete agreements. He didn't require them in the early years of operation, and more recently did not want to have some of his agents subject to one while others were not.
Duane:	Jeff, you know this is a potential problem. Without a non-compete agreement in place what is to prevent the agents from starting their own agency and taking their customers with them?
Jeff:	Well, I am hoping that when they experience a more progressive management method they will recognize that it will lead to more productivity and more income and wish to remain at the agency. Duane, you seem less than enthusiastic about this acquisition. Are you saying that I should back off from this purchase?
Duane:	Jeff, It is your decision, but my assessment of this proposed transaction is that you will be paying for an agency based on an expected future stream of income that is far

from certain. There are significant cultural differences between your agency and the agency you are trying to acquire. You will most likely have to engage in a process of deculturation at the new agency that will result in significant turnover. This turnover most certainly will lead to a loss of revenue. You will personally have to spend a great deal of your time and effort managing the transition at the new agency which will result in less of your time being available to manage your established agency. This could very well jeopardize the performance level of your agency for quite a while. I suggest that if you wish to acquire another agency, it should be one that is much more compatible with your current operations.

Jeff: Duane, I guess I'm surprised that you are so skeptical. Although I am very enthusiastic about this acquisition maybe I need to think it over little more. Thanks for your input. I may need to meet with you again very soon.

Later that afternoon, Jeff watched the line of dark, stormy, turbulent rain clouds approaching from the west. In a way, they reflected his uncertain mood. He carefully recalled Duane's conclusions regarding the acquisition and wondered whether the differences between the two agency's cultures were indeed too great to overcome. While Ward Stevens Insurance, Inc was not nearly as progressive in their management policies as Active Insurance, Inc., they still had achieved a reasonable degree of success. As with many companies, the management practices that are used are to a certain extent the function of the generation of individuals that employ them. Jeff did realize that many organizations staffed and managed by older, long-term employees would be less innovative than newly formed organizations staffed and managed by younger individuals. However, the younger organization usually lacked the depth of industry knowledge and experience possessed by the older organization. Could the two organizational cultures be combined in a manner to form a new culture that would be better than the two that currently exist?

He pondered his options. Should he trust his ability to overcome the differences between the two agencies, or should he start looking for another acquisition target? Maybe he should simply be satisfied with the internal growth rate his agency had already achieved, concentrate on internal growth and forget acquisitions altogether. He fretfully concluded that making these types of decisions is never easy.

ACCOUNTING FOR BUSINESS COMBINATIONS AND THE CONVERGENCE OF INTERNATIONAL FINANCIAL REPORTING STANDARDS WITH U.S. GENERALLY ACCEPTED ACCOUNTING PRINCIPLES: A CASE STUDY

Marianne L. James, California State University, Los Angeles

CASE DESCRIPTION

The primary subject matter of this case concerns changes in accounting for business combinations and the convergence of International Financial Reporting Standards (IFRS) with U.S. Generally Accepted Accounting Principles (GAAP). The case focuses on the effect of the changes on financial statements of global entities, as well as strategic decisions made by company executives.

Secondary, continuing significant differences between U.S. GAAP and IFRS and future potential developments in accounting for consolidated multinational entities are explored. This case has a difficulty level of three to four and can be taught in about 50 minutes. Approximately three hours of outside preparation is necessary to fully address the issues and concepts. This case can be utilized in an Advanced Accounting course, either on the graduate or undergraduate level to help students understand changes in and differences between U.S. GAAP and IFRS. Two sets of questions address U.S. GAAP and IFRS and include researchable questions that are especially useful for a graduate level course. The case has analytical, critical thinking, conceptual, and research components. Utilizing this case can enhance students' oral and written communication skills.

CASE SYNOPSIS

Financial reporting in the U.S. is changing dramatically. Consistent with the Securities and Exchange Commission's proposed "Roadmap" (SEC, 2008), the U.S. likely will join the more than 100 nations worldwide that currently utilize International Financial Reporting Standards (IFRS), and require the use of IFRS in the U.S.

Because of the globally widespread use of IFRS, multinational entities with subsidiaries that prepare IFRS-based financial statements already have to be knowledgeable about IFRS as well as the current differences between U.S. GAAP and IFRS. Fortunately, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) are working together to bring about convergence between the two sets of accounting standards.

Recently, FASB and the IASB issued new and revised several existing standards that eliminate many differences between U.S. GAAP and IFRS with respect to business combinations and consolidated financial statements. However, some significant differences persist. Until the SEC makes a final decision regarding the mandatory use of IFRS, and during the proposed multi-year transition period, current and future accounting professionals must continue to keep abreast of changes in U.S. GAAP, be knowledgeable about differences between U.S. GAAP and IFRS, and, at the same time, prepare for the likely transition to IFRS. In addition, company executives should be cognizant of developments that may affect their strategic decisions as the U.S. moves toward a likely adoption of IFRS during the next five years.

This case focuses on the effect of changes in financial reporting for business combinations. Changes as well as continuing differences between U.S. GAAP and IFRS are explored. Secondarily, strategic decisions arising from the changes and the likely future adoption of IFRS are addressed. This case, which can be utilized in Advanced Accounting on either the graduate or undergraduate level can enhance students' analytical, technical, critical thinking, research, and communication skills.

INTRODUCTION

Financial accounting and reporting in the U.S. is changing rapidly. During the past six months, the Financial Accounting Standards Board, the primary accounting standard setter in the U.S., issued twelve (12) new standards and launched its on-line "Accounting Standards Codification," which organizes existing GAAP into 90 topics (FASB, 2009). At the same time, a significantly more dramatic change is on the horizon for accounting professionals, company executives, and financial statement users.

Consistent with the SEC's 2008 proposal entitled, "Roadmap for the Potential Use of Financial Statements Prepared in Accordance With International Financial Reporting Standards by U.S. Issuers," (Roadmap) in approximately five years, public companies likely will have to utilize IFRS, instead of U.S. GAAP (SEC, 2008). In fact, some large global U.S.-based entities are permitted to early-adopt IFRS starting in 2009. The SEC expects to reach a final decision regarding the mandatory adoption of IFRS in 2011 (SEC, 2008).

If the U.S. indeed adopts IFRS as the required standard for financial accounting and reporting, the U.S. will join the more than 100 nations worldwide that currently permit or mandate the use of IFRS. For example, starting with the 2005 reporting period, all European public companies listed on any European stock exchange must prepare IFRS-based financial statements. Other nations, such as Canada, are planning to adopt IFRS in the near future.

Currently, U.S. GAAP and IFRS are not identical. However, since signing their Memorandum of Understanding, commonly referred to as the "Norwalk Agreement," in 2002, FASB and the IASB have been working together to develop a set of high-quality globally acceptable

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financial accounting standards and to bring about convergence of U.S. GAAP and IFRS. Since the Norwalk Agreement was signed, many new and revised standards issued by FASB and the IASB have served the purpose of eliminating existing differences. However, while many differences have been eliminated, others persist.

Accounting for and reporting by global entities is quite complex. U.S., as well as international accounting rules require that a parent company consolidates its subsidiaries' financial statements with the parent company's financial statements. Recent standards issued by the IASB and FASB have eliminated many differences between U.S. GAAP and IFRS in accounting for business combinations and financial reporting for consolidated entities. However, some significant differences continue to exist.

KLUGEN CORPORATION

Irma Kuhn, CPA, CMA holds the position of Chief Financial Officer (CFO) of Klugen Corporation, a global telecommunications company. Klugen is a consolidated entity headquartered in the U.S. with four majority-owned European subsidiaries. The company has expanded primarily by acquiring majority interest in European companies and holds between 51% and 70% of the outstanding voting stock of its subsidiaries. Three of these subsidiaries were acquired in stages and consolidated once the company achieved majority ownership.

Consistent with current accounting rules, Klugen consolidates all four of its subsidiaries. In addition, Klugen also holds financial interests in several unconsolidated entities and accounts for those as investments.

Klugen's European subsidiaries currently prepare their financial statements consistent with International Financial Reporting Standards (IFRS), which are promulgated by the International Accounting Standards Board (IASB). Klugen, the parent company, issues consolidated financial statements, which include the results of its majority-owned subsidiaries in conformity with U.S. GAAP. Preparation of Klugen's consolidated financial statements requires that Irma and her staff convert the subsidiaries' IFRS-based financial statements into U.S. GAAP prior to consolidating the numbers. This process is quite complex and requires many of the accounting departments' resources.

Irma is well aware of efforts between the FASB and the IASB to bring about convergence between U.S. GAAP and IFRS. She expects that consistent with the SEC's "Roadmap," (SEC, 2008) within the next five years, U.S. public companies likely will have to apply IFRS, rather than U.S. GAAP. Irma welcomes this development and believes that in the long-run, use of IFRS by the parent company as well as its subsidiaries will preserve and strengthen the company's global financial competitiveness. In addition, she believes that it will simplify the accounting and consolidation process significantly and, in the long-run, reduce financial reporting costs. She is aware, however, that in the short-run many challenges, such as conversion of the accounting and IT systems and extensive staff training will increase costs. Knowing that the SEC's Roadmap proposes a phased-in adoption by public companies between 2014 and 2016, Irma plans to recommend adoption of IFRS at the earliest permitted time.

As the person who ultimately is responsible for financial reporting, Irma is very knowledgeable about current and proposed changes in U.S. GAAP as well as IFRS. She knows that the IASB and FASB have issued new and revised standards applicable to business combinations that affect the company's consolidated financial statements. After in depths analysis of the new and revised standards, she determined that many of the past differences between U.S. GAAP and IFRS where eliminated when the FASB issues FAS 141 R "Business Combinations" and FAS 160 "Noncontrolling interest in consolidated financial statements" (FASB, 2007) and the IASB revised IFRS 3 "Business Combinations" and IAS 27 "Consolidated and Separate Financial Statements" (IASB, 2008). She also realizes that some significant differences still persist. Klugen Corporation has properly adopted FAS 141R and FAS 160 (now codified in sections 805 and 810 of FASB's 2009 Standards Codification) for the 2009 fiscal period and its forthcoming annual report will reflect those changes.

Irma regularly conducts in-house seminars to instruct her accounting staff regarding new developments in financial reporting. In fact, her seminars meet the Continuing Professional Education (CPE) sponsor requirements set forth by the National Association of State Boards of Accountancy (NASBA) and the Quality Assurance Service (QAS), which is required by State Boards of Accountancy and other licencing organizations for the renewal of CPA, CMA and other professional certifications.

Irma's CPE seminars entitled "Financial Reporting Updates" are always well received by her staff. During the past six months, Irma already has held several seminars to inform her staff regarding IFRS. Those who attended all her seminars are already familiar with the SEC's Roadmap that proposes adoption of IFRS starting in 2014, and also know about some of the most significant differences between U.S. GAAP and IFRS.

Since in about five (5) months, Klugen Corporation will issue its consolidated financial statements, which will, for the first time, incorporate FAS 160 and FAS 141R, Irma decides to schedule a seminar on "Business Combinations - Consolidated Financial Statements" for October 15, 2009. The following is a brief agenda for Irma's Seminar:

Business Combinations - Consolidated Financial Statements - Financial Reporting Update October 15, 2009 - Agenda

- 1. Review of fundamental concepts of business combinations and consolidated financial statements
- 2. Changes to U.S. GAAP (FAS 141R and FAS 160)
- 3. Significant continuing differences between U.S. GAAP and IFRS
- 4. Developments with potential impact on future fiscal periods

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5. Questions

The seminar will be highly beneficial for staff members who are currently involved or planning to become involved in critical aspects of financial reporting and also for those who want to develop their knowledge of IFRS. During the seminar, Irma distributes several handouts, including the company's prior year income statement and balance sheet for reference.

Table Klugen Co Consolidated State for the year ended D Numbers are in million (rporation ement of Income December 31, 2008	
Operating Revenues		
Business service	\$15,500	
Residential service	10,200	
Wireless service	18,000	\$ 43,700
Operating Expenses		
Cost of services (excludes depreciation & amortization)	\$ 15,200	
Selling, general, administrative expenses	11,100	
Depreciation and amortization	7,150	\$ 33,450
Operating Income		\$ 10,250
Other Income (Expense)		
Interest expense	(820)	
Minority interest	(1,010)	
Investment income	405	(1,425)
Income Before Income Taxes		\$ 8,825
Income Tax		3,250
Net Income		5,575
Basic Earnings Per Share		\$2.08
Diluted Earnings Per Share		\$1.92
The accompanying notes are an integral part of the consoli	idated financial statements	

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Tab Klugen Co Consolidated I December (Numbers are	prporation Balance Sheet 31, 2008	
Assets		
Current Assets		
Cash and cash equivalents	\$ 519	
Accounts receivables (net of allowances of \$310)	4,200	
Prepaid expenses	400	
Other current assets	520	
Total Current Assets		\$ 5,639
Non-Current Assets		
Property, plant & equipment (net)	25,600	
Goodwill	18,500	
Licenses	12,900	
Customer relationships (net)	3,100	
Investments in non-consolidated entities	1,000	
Dividends receivables	300	
Other assets	1,200	
Total Non-Current Assets		\$62,600
Total Assets		\$68,239
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable and accrued liabilities	5,200	
Advanced billings and deposits	920	
Accrued taxes	420	
Total Current Liabilities		\$ 6,540
Non-Current Liabilities		
Long-term debt	25,500	
Post-retirement benefits	2,300	
Deferred taxes	3,200	
Total Non-Current Liabilities		\$31,000
Total Liabilities		\$37,540
Minority Interest		5,000

Table 2Klugen CorporationConsolidated Balance SIDecember 31, 2008(Numbers are in million)	heet	
Stockholders' Equity		
Common stock (\$1 par, 100,000,000 authorized, 60,000,000 issued)	60	
Additional paid in capital	13,095	
Retained earnings	14,588	
Accumulated other comprehensive income	(2,044)	
Total Stockholders' Equity		25,699
Total Liabilities and Stockholders' Equity		\$68,239
The accompanying notes are an integral part of the consolidated financial	statements.	

The Seminar

Agenda Item 1 Fundamental Concepts of Business Combinations - Consolidated Financial Statements

During the first part of the seminar, Irma reviews several fundamental concepts relating to accounting for business combinations. She emphasizes that these concepts are common to both U.S. GAAP and IFRS.

Fundamental Concepts common to both U.S. GAAP and IFRS

- The parent company issues consolidated financial statements that include the results for all subsidiaries that the company controls.
- Control is usually assumed when the parent holds a controlling financial interest (generally, more than 50% ownership of the outstanding voting common stock.
- Consolidated financial statements include 100% of the subsidiaries' assets, liabilities, revenue, expense, gains, and losses, even if the subsidiary is only partially owned.
- Subsidiaries' previously unrecognized assets are identified at time of business combination and are recognized in the consolidated financial statements.
- Goodwill is recognized on the consolidated balance sheet if the acquisition cost exceeds the fair value of the subsidiaries' identifiable net assets.
- Goodwill is not amortized, but periodically tested for impairment.
- Non-controlling interest (formerly called minority interest) is recognized on the consolidated balance sheet.

Agenda Item 2 Changes in U.S. GAAP

Irma discusses the most important changes in accounting and financial reporting for consolidated entities consistent with FAS 141R and FAS 160. She prepares a handout for the seminar participants, consisting of a comparative table that contrast the new rules (effective for the 2009 financial statements) with the prior rules.

	Table 3			
Recent Changes to U	Recent Changes to U.S. GAAP - effective 2009 - FAS 141R and FAS 160			
Issue	Effective 2009 Financial Statements	Pre-2009 Financial Statements		
Subsidiaries' assets and liabilities	All assets and liabilities are revalued to fair market value at acquisition date (100% revaluation).	Assets and liabilities were revalued based on the parent's ownership percentage		
Negative goodwill	Recognized as gain for year of acquisition.	Recognized as a proportionate reduction of long-term assets.		
Balance sheet classification of non- controlling interest (NCI)	NCI is classified as equity.	NCI is recognized as liability, equity, or between liabilities and equity.		
Income statement presentation of NCI's share of income	Presented as a separate deduction from consolidated income to derive income to controlling stockholders.	NCI was presented as part of "Other income, expenses, gains, and losses."		
NCI valuation	Is carried at fair market value of subsidiaries' net assets, multiplied by NCI percentage.	Carried at book value of subsidiaries' net assets, multiplied by NCI percentage.		
Cost of business combinations	Direct costs are expensed during year of acquisition	Direct costs were capitalized as part of acquisition cost.		
In process research and development (R&D)	Are capitalized at time of acquisition.	Could be expensed at time of acquisition.		
Acquisition in stages	Previously acquired equity interest is remeasured when acquiring company achieves control; gain or loss is recognized in the income statement.	Measurement was based on values at time of individual equity acquisition		
Terminology	Minority interest is now referred to as "non-controlling interest."	The commonly used term was "minority interest."		

Agenda Item 3 Significant Continuing Differences Between U.S. GAAP and IFRS

Irma highlights continuing significant differences between U.S. GAAP and IFRS. This information is particularly important for those staff members who are involved in the consolidation process and those who wish to prepare for the future adoption of IFRS. The following table represents a handout based on Irma's PowerPoint presentation:

Table 4 Summary of Current Differences Between U.S. GAAP and IFRS		
Issue	U.S. GAAP	IFRS
Definition of control	Defined as "controlling financial interest" (ARB 51). Usually interpreted as majority voting interest.	Focuses on "power to govern financial and operating policies" (IFRS 3, par. 19); The goal is that activities generate "benefits" for controlling entity.
Shares considered for determining control	Only existing voting rights are considered.	May include exercisable shares.
Calculation of non-controlling interest (NCI)	NCI interest is measured at fair value of total net assets and includes share of goodwill.	Choice between (1) fair value and (2) proportionate share of fair value of identifiable net assets.
Calculation of goodwill at time of acquisition	Goodwill (if it exists) also includes share attributed to NCI.	If second option is chosen, goodwill is only attributed to controlling interest (parent).
Contingencies - initial measurement	Contractual contingent assets or liabilities are valued at fair market value. Non-contractual contingent assets and liabilities that meet the 'more likely than not' test are accounted for consistent with SFAC 6. Non-contractual assets and liabilities: If they do not meet 'more likely than not test' are accounted for consistent with FAS 5.	Recognition of contingent liability: Contingent liability is recognized even if it is does not meet the 'probable' test if the present obligation arises from a past event and is reliably measured.

Table 4 Summary of Current Differences Between U.S. GAAP and IFRS		
Issue	U.S. GAAP	IFRS
Goodwill impairment test	Two-step approach: (1) compare book value of reporting unit to fair market value of reporting unit; (2) if book value is larger, impairment is equal to book value less implied fair value of goodwill.	One-step approach Compare book value to larger of cash generating unit's (a) fair value less selling cost and (b) value in use [value in use = PV of expected future cash flows].

Agenda Item 4 Developments with Potential Impact on Future Fiscal Periods

Irma briefly mentions other developments in the consolidation area. She mentions that in June 2009, FASB issued FAS 166, "Accounting for Transfers of Financial Assets," and FAS 167, "Amendments to FASB Interpretation No. 46R" (FASB, 2009). FAS 166 eliminates the concept of qualifying special purpose entities (SPE); FAS 167 deals with the consolidation aspects of this elimination. Specifically, companies with formerly classified qualifying SPEs must now assess these entities for possible consolidation.

FAS 167 focuses on control and the primary beneficiary of the SPE in determining whether a company, such as Klugen Corp., must consolidate its SPE. A primary beneficiary is (1) able to direct activities of the SPE and is required to absorb significant gains and losses. A company is assumed to have control if (1) it has the power to direct activities, (2) has the most significant impact on the entity's performance, and (3) is required to absorb losses, and benefit from gains (FAS 167, par. 14A-G). Irma reminds her staff that currently Klugen Corporation does not have investments in qualifying SPE's; thus, the new standards will not affect the company.

Irma also mentions that in December 2008, the IASB issued Exposure Draft 10 (ED 10) "Consolidated Financial Statements," (IASB, 2008), which proposes a single definition of control that is very similar to the FAS 167 definition. Once this exposure draft is finalized, convergence between U.S. GAAP and IFRS likely will be further enhanced. Irma promises to keep her staff informed about developments in that area.

Agenda Item 5 Questions

At the end of the seminar, many questions arise from the staff and some from the CEO, who attended the second half of the seminar. Irma answers as many questions as possible and promises to prepare a short question/answer briefing sheet for all those who

were present at the seminar. During the seminar she summarizes the following questions as shown in the Assignments section.

ASSIGNMENTS

Answer the questions specifically assigned by your instructor.

U.S. GAAP Questions

- 1. How will adoption of the new accounting standards (FAS 141R and FAS 160) affect Klugen Corporation's financial statements in the forthcoming reporting period?
- 2. Utilizing the 2008 numbers, prepare (1) a partial income statement starting at income from operations and (2) the equity section of the balance sheet consistent with the requirements of FAS 141R and FAS 160 (FASB Accounting Standards Codification sections 805 and 810).
- 3. How will adoption of FAS 141R and FAS 160 affect Klugen Corporation's financial statements in the long-run?
- 4. What key financial ratios will be affected by the adoption of FAS 141R and FAS 160? What will be the likely effect?
- 5. What additional estimates have to be made consistent with the new accounting standards?
- 6. Could any of the recent and forthcoming changes affect the company's acquisition strategies and potentially its growth?
- 7. What were FASB's primary reasons for issuing FAS 141R and FAS 160? (Research question)
- 8. What are qualifying SPEs? Do they exist under IFRS? What is the effect of FAS 166 eliminating the concept of qualifying SPEs on the convergence of accounting standards?
- 9. FASB and IASB recently issued an updated Memorandum of Understanding. Retrieve the updated memorandum and identify several issues that the two standard setting boards are jointly focusing on to facilitate convergence. (Research Question)

IFRS Questions

- 1. From the consolidation perspective, what would be the likely overall effect of adopting IFRS on the company's financial statements?
- 2. What potential effect would arise if Klugen were to select the option under IFRS 3 to value non-controlling interest at the proportionate share of its subsidiaries' net identifiable assets?
- 3. Do you believe that an impairment of goodwill would be more likely under IFRS or under U.S. GAAP? Why, or why not?
- 4. What challenges would arise for the accounting staff if the company adopts IFRS? Do you believe that he company is making progress toward meeting some of these challenges?
- 5. What opportunities would arise for the accounting staff if the company adopts IFRS?
- 6. What other (non-staff related) factors should Klugen Corporation consider prior to adopting IFRS? Differentiate between advantages and disadvantages.
- 7. Two of Klugen's non-consolidated entities regularly grant stock options to its employees. How could this affect Klugen's accounting for these entities under IFRS?
- 8. As indicated in the case, Irma previously highlighted some other significant differences between IFRS and U.S. GAAP. Research the issue and find three (3) differences other than those related to business combinations. You may want to consider accounting for inventory, extraordinary items, property, plant and equipment, and research and development.
- 9. Assume that the SEC provides a choice in the timing of the adoption of IFRS. What ethical issues could arise for the CFO in deciding whether to adopt IFRS at the earliest possible, or at a later required date? (Research question)
- 10. Review comment letters received by the SEC regarding its Roadmap. List two concerns mentioned by those offering comments. (Research question)

REFERENCES

Committee on Accounting Procedures (1959). Accounting Research Bulletin No. 51. Consolidated Financial Statements. *Original Pronouncement*. Financial Accounting Standards Board: Stamford: CT. Financial Accounting Standards Board (2009). FASB Accounting Standards Codification. Http://www.fasb.org.

- Financial Accounting Standards Board (2009). FASB Statement No. 167. Amendments to FASB Interpretation 46R. Retrieved on July 7, 2009, from http://www.fasb.org.
- Financial Accounting Standards Board (2009). FASB Statement No. 166. Accounting for the Transfer of Financial Assets an amendment of FASB Statement No. 140. Retrieved on July 7, 2009, from http://www.fasb.org.
- Financial Accounting Standards Board (2007). FASB Statement No. 160. Non-Controlling Interest in Consolidated Financial Statement. Retrieved on January 5, 2008, from http://www.fasb.org.
- Financial Accounting Standards Board (2007). FASB Statement No. 141R. Business Combinations. Retrieved on January 5, 2008, from http://www.fasb.org.
- Financial Accounting Standards Board (2002). Memorandum of Understanding. *The Norwalk Agreement*. September 18. Retrieved on June 18, 2008, from fasb.org/newsmemoradum.pdf.
- International Accounting Standards Board (2008). ED 10 Consolidated Financial Statements. December 2008. Retrieved on March 30, 2009, from http://www.iasb.org.
- International Accounting Standards Board (2008). International Financial Reporting Standard No. 3. Business Combinations. London, England: IASB.
- International Accounting Standards Board (2008). International Accounting Standard No. 27. Consolidated and Separate Financial Statements. London, England: IASB.
- Securities and Exchange Commission (2008). Roadmap for the Potential Use of Financial Statements Prepared in Accordance With International Financial Reporting Standards by U.S. Issuers. Release No.: 33-8982, File No. S7-27-08. Retrieved on November 19, from http://www.sec.gov.

AUTHOR'S NOTE

This is a fictitious case. Any similarities with real companies, individuals, and situations are solely coincidental.

THE SHOPPES AT RIVERSIDE

Fonda L. Carter, Columbus State University Kirk Heriot, Columbus State University

CASE DESCRIPTION

This case asks the students to recommend a decision to a group of individuals on whether or not to pursue purchasing The Shoppes at Riverside, even when the purchase price is minimal (\$1). It is based on the actual experiences of one of the authors. The Shoppes at Riverside is a unique business located in a historic building in a downtown area. The store occupies approximately 5,500 square feet of space (leased from a local foundation) and subleases space to dealers selling upscale merchandise including art, antiques, home accessories, and gift items. The store charges a monthly rent to each dealer (based on their booth square footage) along with a 10% commission on sales. The students are given basic information provided by the present owner and are asked to evaluate the information given to project monthly cash flows and then to make a recommendation to the potential purchasers. They are also asked to evaluate and suggest other lines of business that might be added to the present business to increase the profitability of the store. This case is appropriate to use in an Intro to Small Business Class as the size of the business is ideal for any course that emphasizes entrepreneurs or small businesses. This assignment can be completely individually or as a group assignment.

CASE SYNOPSIS

The primary focus of the case is a purchase decision. The information given to the students to utilize in formulating their decision includes store sales by month for each of the last three years as well as operating expenses. From the information given, the students are asked to construct proforma cash flows for the year 2007 by month based on their assumptions regarding sales and occupancy levels. They are also asked to research other product lines the potential buyers could add to the store to complement the present merchandise presently being sold by dealers. Although the store does collect rental income, there is a cap on percentage rents at 10% of sales which in turn limits the total revenues of the store. The students are given some ideas on lines of business to research within the questions of the case. They may have others they would also like to research.

A second phase of the case analysis would be to break the case into group assignments and have each group research and prepare presentation on such topics as (1) the various type of

advertising options and the related costs applicable to small retail businesses in order to develop and implement a marketing plan; (2) the type of business formation available to small businesses (i.e. Corporation, Sub-S Corporation, Partnership, LLP; (3) additional product lines to add to increase revenues of the business; and (4) the advantages and disadvantages of developing a website and selling "on-line" with this type of business. As a result of the individual and group projects, classroom discussions could be held based on the findings of the groups as well as other current issues faced by small businesses. The advantage of this case is that it presents students with a real-life purchase decision and presents relevant topics for in-class discussions.

INTRODUCTION

Laura Lewis, Patricia Robbins, and Mary Farley were eating lunch at a local delicatessen. The ladies were excited about a recent business opportunity that was presented to them by Lucy Taylor, the owner of The Shoppes at Riverside. Lucy wanted to sell her business to someone that would take over her vision for an art and antique store in the uptown Columbus, Georgia area.

Laura:	"So what do ya'll think?"
Patricia:	"I'm pretty excited about it. I think we can do this."
Mary:	"I don't want to jump into this purchase without considering all the facts."
Laura:	"Mary what do you mean? Lucy has given us all of the fact as she has given us a copy of a letter (originally written to the local real estate company handling the new lease) outlining all the employees and their pay rates; all of the operating expenses for the store; and the sales by month for the last three years. It all looks good to me."
Mary:	"Yes, I am wearing my accountant's hat. We need to evaluate not only the business, but also other issues as well. For example, which one of us is going to manager the business on a day to day basis? I can't do this because I have a full time job. I have the expertise in accounting and finance to advise the business and prepare all the accounting records but that would have to be the extent of my involvement."
Laura:	"Patricia and I neither one work. We would be available to manage the store on a day to day basis. Besides, Helen Mitchell, the manager of the store states she wants to stay on with the new owner. We would only have to oversee her. Patricia and I could split the duties. I could handle the employees and their work schedules and Patricia could handle the issues with the vendors".

Mary: "I think there may be other issues as well. Even though the purchase price is minimal, there is the opportunity cost of our time and effort that could be utilized elsewhere. Let's take a couple of days and think about it and evaluate all the advantages and disadvantages. I will prepare a cash flow analysis for the year 2007. We can meet again in a week to make a decision."

CASE HISTORY

The Shoppes at Riverside was originally opened in 1998 by two partners (Lucy Taylor and Sally Owens) in an older brick storefront in downtown in Columbus, Georgia. Columbus, Georgia is located on the Chattahoochee River (separating the city from the Alabama state line) approximately 150 miles southwest of Atlanta. It is the third largest city in Georgia and has a population in the metropolitan area of approximately 250,000 people.

The first building occupied by the store was approximately 3,000 square feet. The original intent of the business was to offer space to art and antique dealers for the sale of their merchandise. The purpose of opening the business was two-fold. The primary purpose was to offer upscale merchandise in Columbus as there were no other businesses that offered quality art and antiques. The second purpose was for it to be a secondary source of additional income for the two owners. The store opened with approximately twenty vendors. The store leased "booths" to these vendors ranging from 100 sq. feet to 200 sq. feet each. Rent was charged based on the size of the booth and ranged from \$150 to \$250 per vendor per month. The owners of the store also charged each vendor 10% of each sale as a commission and 2.5% for credit card sales to cover credit card fees. The owners were responsible for collection and remittance of sales taxes, credit card processing, and employment of sales assistants. While the original intent was to have only art and antique vendors, in order to lease all of the space, the owners added vendors that merchandised clothing, jewelry and gifts. Vendors were required to complete an application for space and were highly scrutinized to insure a high level of quality merchandise. In fact, the owners knew the majority of the vendors personally. The store also included a "tea room" that served a light lunch. Although no income statements were available for review, the owners stated that business was profitable at this location. Occupancy of the rented booths remained nearly 100% at all times.

In 2003, one of the partners, Lucy Taylor purchased two larger historic buildings in the next block with a separate partner (John Thomas as an investment. Each building housed three floors each with approximately 5,500 square feet on each floor. A floor on each building is located below the street level. The other two floors were above street level and both run parallel to a city street and both buildings take up a side of an entire block. The buildings were renovated from their original use as a clothing factory. The historic buildings' outside façade is attractive old brick. Since the lease at the previous location was up for renewal at the same time, Lucy and Sally then decided to move The Shoppes at Riverside into one of these old buildings. They spent approximately \$30,000

in renovating the second floor (street level) of Building One. Renovation included subdividing the 5,500 square feet into booths for individual vendor spaces, adding a counter front/cash register station at the front of the store, installing a security system, installing phone lines, installing wiring/lights in each booth, and a kitchen area in the back of the store. The two bathrooms also had to be updated to comply with the city building code.

At the new location, the owners were able to add more vendors. This building space allowed for 28 booth rentals and 14 wall spaces for rent (see Table Two for a breakdown). Some artists were interested only in renting wall space located between individual booths. At this location, the owners stated the business was profitable for several years. The actual statements were not available for review. In 2005, Sally Owens decided to leave the business and Lucy Taylor bought out her interest. Over the next few years, the store experienced a decline in sales. According to Lucy, one of the main reasons was major construction work that was taking place in the downtown area where the store was located. Each city street underwent substantial work on the sewer lines causing problems in traffic flow. The construction project was projected to last a period of over two years. Even though only one street was under construction at a time, it was a nightmare trying to maneuver around the "construction of the moment". Many shoppers that had frequented downtown shops went to the north area of town. The construction was scheduled to be completed by the end of 2007.

In early 2007, Lucy Taylor and John Thomas decided to sell the two historic buildings to the foundation of a local college. The college had been establishing a downtown campus for the art and music departments. The two historic buildings were located on the block between two new structures the college owned. Adjacent to the two historic buildings was a large parking lot which was deemed a prime location for parking for the college's downtown campus. In the fall of 2007, Lucy Taylor also decided to sell The Shoppes at Riverside. She did not need any secondary income from the shops and basically used the ownership as a hobby. She was willing to sell all of the equipment, including cash registers, security system, sound system and inventory (a few books and wrapping products) for a nominal amount. Her main goal was to have someone take over the business that would continue her vision for an art and antiques store.

POTENTIAL PURCHASERS

Three of the present vendors (Patricia Robbins, Laura Lewis and Mary Farley) of The Shoppes at Riverside were approached by the owner, as well as the president of the Uptown Business Association, to see if they would be interested in purchasing the business. The potential purchasers were very familiar with the business but none of them had actual retail experience other than their present booth ownership. Patricia Robbins and Mary Farley owned a booth together featuring furniture and home accessories. Laura Lewis owned a booth with another individual. All three were good friends. Patricia Robbins and Laura Lewis were college graduates but at the present time did not work by choice. However, since they did not work they would have the time

to spend on a day to day basis with the on-sight management of the business. Mary was a CPA but was currently teaching accounting at a local college. Her contribution would be financial advice as well as all of the bookkeeping duties of the business, including payroll taxes and returns; sales taxes and returns; and any other business related matters. Their initial purchase price would be minimal (\$1). Lucy, the present owner, along with the management of the local college foundation and the management of the Uptown Business Association were looking for someone to purchase the business and retain its current retail focus.

The purchase price would include two computers; computer retail software (specifically written for the consignment store); build-outs for the booths including electrical outlets for each, a large front counter for the cash register with a laser printer; a kitchen area with a free-standing ice maker, a refrigerator, a microwave, sink, and built in cabinets; two bathrooms; all wrapping products (tissue paper, ribbon, cellophane bags, and shopping bags); a small inventory of books; an installed security system; and a sound system. The present owner basically wanted to walk away from the business and leave everything.

The owner has made available information to the potential purchasers in order to make their decision. A summary of the relevant information is given below.

STORE LOCATION

The store is located in approximately 5,500 square feet of space. It is an open building with walls separating the facility into individual booths. The walls between the booths run approximately 80% of the height of the ceiling leaving an open, airy feeling to the store. It is located across the street from the City of Columbus Center for Performing Arts, a Marriott Hotel, and the local convention center. While more retail businesses have located in the north end of town, local retail business in the uptown area has begun to grow again with the scheduled completion of the construction on the major streets. A local uptown business association has also started a more concentrated marketing effort for the "Uptown Area" (previously referred to as downtown Columbus). One of the adjacent buildings to the new store location also houses the local Convention and Trade Bureau and the floor below the store houses a Quiznos restaurant.

While the store is not located in the "booming" north end of town, there is potential for retail development. There are several major employers in the uptown/downtown area. One is a major credit card processor with approximately 3,000 employees in their uptown campus. It is located seven blocks away on the other side of the uptown area. Another employer is a bank holding company with approximately 500 employees located only three blocks away. A little further away but still within a close driving distance is the home office of large insurance company. There is also the local government center (two blocks away) as well as many smaller businesses, primarily law offices. One of the challenges of the new owners would be to target market to these companies and promote awareness of the store.

STORE INCOME

The store has several sources of income. There are direct store sales primarily from inventory of books (cook books and art related books) owned by the store itself. There is additional income from vendors in the form of rent and commissions. Each vendor pays three types of fees. A fee for the booth rental (the rental rates for the available booth and wall spaces are shown in Table Two); a percentage rent or 10% of each sale as a commission; and a fee twice a year for advertising. The fee for advertising is \$100 for a booth renters and \$50 for wall renters and is due on March 1 and October 1 each year. At the present time, the majority of the booth and wall spaces are rented. However, there are a few vacancies. The present owner stated she has not tried to rent these vacant spaces as she is not sure that she will continue the business if she cannot fine a purchaser. She does have a waiting list for individuals wanting to lease space. Vendors are required to sign a six-month lease and pay the first and last months' rent payment upon signing the lease. They are to give thirty days written notice to terminate the lease after the initial six-month period.

Rent Expense

The building the store occupies is currently being managed by a local real estate company on behalf of the foundation. With new ownership, the monthly rental will be \$4,322 and a three year lease will be required. This rental rate is below local rental rates per square foot in the area. The rental payment includes the utilities for water and repairs for major maintenance costs. The lessee is responsible for minor repairs.

Utilities

Monthly electricity cost runs from \$800-\$1000 per month. It is typically higher in the summer months. The building is all electric and there are no other utility costs.

Employees

The store hours are from 10:00am to 5:30pm on Monday thru Friday and from 10:00am to 4:00 pm on Saturdays. The store is closed on Sundays. Two employees are needed during these hours and they usually arrive 15 minutes before the store is opened and leave 15 minutes after the closing time. They do not take a lunch hour but are allowed to take a break and eat lunch in the back kitchen area. During the holidays, additional employees may be needed. One employee acts as a manager and works four days (Monday – Thursday) a week and is paid \$10 an hour. The manager has worked at the store for five years and would like to continue with the new ownership if possible. A second employee works two days during the week and is paid \$8 an hour. Two additional

employees work one day a week and are paid \$7 an hour. The rest of the hours are completed by part-time employees paid \$6.50 per hour. Employees are paid bi-weekly for the week ending the previous Saturday. The first payroll in the year 2007 is January 11th. The employees receive no benefits other than the payroll taxes required by law.

Insurance

Insurance has been averaging \$2200 a year and includes general liability and workmen's compensation. It does not include any insurance on the items owned by the vendors but does include property insurance on the items owned by the company.

Janitorial Service

The store provides janitorial service for the common area, kitchen area and bathrooms. The cleaning crew comes once a week and the charge has been running \$75 per week. Vendors are responsible for cleaning their own booths.

Advertising

Lucy Taylor, the current owner has an advertising contract with the local newspaper. This contract is \$240 a month and includes three advertisements per week in a local newspaper. An annual contract has to be signed to obtain this rate. Some advertising is also done in two local magazines. Both magazines are bi-monthly and average \$350 for a ¹/₄ page ad space. Lucy stated she tried television advertising but it was too expensive in the current market. Lucy stated that the most effective advertising seemed to be direct mail. She currently has a list of approximately 1,200 customers. The cost to print and mail a basic two-color postcard averages around \$600. She usually sends out a postcard twice a year. While some of the cost of the advertising is supplemented by the required fee, the cost of advertising in the past has been over and above that paid by the vendors. At the current time, there is no utilization of Internet advertising. The store does have a basic website that contains only two pages of information.

Telephone

The cost of telephone service averages around \$350 a month and includes a two-line business phone and a separate line for a fax machine. Currently no Internet listing is utilized and there is no Internet connection. To add Internet to the present computers, it would add \$60 a month and to add an Internet advertisement on Yellowpages.com, it would add approximately \$95 a month.

Other operating expenses

Other operating expenses include store supplies (cleaning supplies, printer paper, bathroom supplies, etc...) and average up to \$200 a month. Wrapping products (gift bags, tissue, and ribbon) are frequently used as the store offers "free gift wrapping" as a customer service. The wrapping products along with the bags used in each sale average 2% of sales.

Taxes

As stated previously, the store pays employment taxes on employees consisting of FICA at 7.65%; State Unemployment taxes on the first \$8,000 of earnings at 2.7%; and Federal Unemployment taxes on the first \$7,000 in earnings at .8%. Other taxes and fees include an annual fee for a business license (\$100) and a fee for gross receipts (or .03% of each sale). The store collects and remits the state and local 7% sales taxes on all sales.

THE PURCHASE DECISION

The three individuals (Laura Lewis, Patricia Robbins and Mary Farley) need to evaluate the information given to them by Lucy and decide if they want to "purchase" the business. If they decide to purchase the business, they would also be required to sign a three-year lease on the building. An investment of cash would also be required for operating expenses and they would need to set up a credit card or line of credit with a bank. If the business is purchased, they also want to evaluate adding a line of business to increase direct income to the store owners. It would be essential for the new line of business not to compete with merchandise currently sold by the present vendors. Some of the types of businesses considered would be a stationery/personalized gift business or a lunch time restaurant. Other decisions to be made if the group decides to purchase the business would be the type of business organization to form with the three individual owners and how the management duties would be divided between them.

QUESTIONS

1. Table One presents monthly sales data for the last three years. Table Two presents the rented booth spaces and their rates. Based on the sales data, the rental data, and the operating expenses outlined in the case, construct a monthly projection of cash flows by month for the year 2007. It is up to the individual or group to be conservative in the occupancy percentages and sales, use averages or be aggressive in the projections. Based on the completed cash flow analysis, make a recommendation to the three potential purchasers

as to whether they should purchase the business. Include in your presentation, both the advantages and disadvantages (identified from reading the case) of purchasing the business.

- 2. If the three individuals decide to purchase the business, what would be the best type of organization to form? Prepare a presentation to include the advantages and disadvantages of a standard partnership, an LLP, a C corporation and a Subchapter S corporation.
- 3. One of the lines of business the potential owners are considering is a "Personalization Station" center including custom printed stationery; on-site printing of invitations; customer ordered stationery and invitations sold to dealers printed by the stationery companies; wedding invitations and embossed stationery; monogramming for towels, handbags, and other miscellaneous items (the actual monogramming would be out-sourced); personalized jewelry and other miscellaneous personalized items. The new owners could utilize the space in one of the larger vacant booths to display the merchandise. There is currently only one retailer in the area offering an extensive amount of personalized merchandise and it is in the north end of town. The potential purchasers believe this to be a viable line of business as they are of the opinion that personalized merchandise is very popular in the southern United States. Research the internet and visit some retailers in your area and interview them on the start up costs for such a business. Develop a presentation to the new owners on the advantages and disadvantages of staring this new line of business.
- 4. Another type of business the new owners might consider is a lunch time restaurant or a "tea room" as was located in the previous location. A lunch time menu could be a draw for bringing in the type of clientele shopping for art, antiques and upscale gift merchandise. There is a small space that could be utilized for approximately five to six café type tables and chairs that could seat four diners each. The kitchen is not equipped as a commercial kitchen (as required by regulations) and would have to be renovated. Another idea would be to have a local restaurant deliver the food for the day. Interview a local restaurant owner and research other sources to determine the startup costs for opening a small restaurant. Evaluate the advantages and disadvantages and make a proposal to the potential purchasers.
- 5. At the current time, the business does not have any type of on-line presence other than a two page website. The potential purchasers are interested in developing a more informational website and possibly include information on each vendor. Develop a basic plan for designing the website and the information that should be included. Include in your plan, the anticipated cost for the website design. An additional consideration is the ability to update the website on a regular basis. The cost of the plan should include the cost for updates. Another selling strategy that could be presented to the potential purchasers is the feasibility

of selling some of the original artwork and antique furniture on-line. This could be accomplished either through the company's own website or through a website service such as godaddy.com. Research the options available and the advantages and disadvantages of selling such merchandise on-line.

6. Research the type of advertising available to small retail stores in your area. From the information on advertising options available in your area, develop an advertising budget and make a recommendation for allocation of the advertising dollars between newspaper, local magazines (if any), television (local network and cable), radio, billboards, internet and direct mail for The Shoppes at Riverside.

Table 1: Sales by Month			
Month	2004	2005	2006
January	\$29,044	\$20,115	\$13,441
February	\$26,807	\$26,863	\$20,107
March	\$55,987	\$23,742	\$20,170
April	\$32,554	\$19,304	\$20,863
May	\$33,069	\$31,246	\$30,158
June	\$30,853	\$23,255	\$22,322
July	\$31,715	\$18,881	\$21,646
August	\$21,600	\$19,451	*\$22,468
September	\$22,029	\$27,199	*\$30,158
October	\$27,446	\$22,690	*\$32,450
November	\$53,884	\$40,408	*\$49,278
December	\$81,744	\$76,684	*\$85,332
Totals	\$446,732	\$349,838	\$368,393

	Table 2: Rental Space and Rates		
Space		Description of Vendor	Rental Amount
Booth 1	A Beau Collection	Antiques, Silver frames, silver serving pieces, and other decorative household items	\$360
Booth 2	Farm Friends	Homemade casseroles, pies and other food items along with kitchen accessories	\$240
Booth 3 & Wall 4	Just for Ewe	Reproduction furniture, lamps, decorative household items and gift items	\$540
Wall 5	РОР	Contemporary original artwork by local artist	\$60
Booth 6 And Wall 30	Portebellos	English antiques, lamps and home accessories	\$490
Booth 7	AEW	Antique furniture and home accessories	\$300
Booth 8	ASLR	Antique furniture, lotions, soaps and food gift items	\$300
Booth 9	Wildwood Antiques	Antiques and lamps and interior design items from a local interior designer	\$375
Walls 10& 11		Original artwork by young local artist	\$50
Booth 12	Market House	A smaller corner booth featuring home accessories and a new baby gift selection	\$140
Booth 13	Vieux Carre	Antiques, lamps and paintings with a French flair	\$250
Wall 14	Jo	Original art by a local artist	\$42
Booth 15	Fifty Fingers	A smaller booth featuring pottery from local artist	\$100
Booth 16	KRJ Antiques	English antiques, lamps, and china	\$220
Wall 17		Vacant	\$30
Booth 18	Martha's	Funky antiques and paintings from the collection of a local interior designer	\$250
Wall 19	Helen	Local artwork from a local painter	\$30
Booth 20	Envision It	Furniture, lamps and decorative accessories for the home	\$250
Booth 21	Our Friends	Furniture and home accessories	\$490
Wall 22		Original artwork by local artist	\$50
Booth 23	A Beautiful Touch	Gift items	\$270
	Blueberry	An extension of a local store in the north area of town with small furniture	\$270

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Table 2: Rental Space and Rates			
Space		Description of Vendor	Rental Amount
Booth 24	Hill	pieces, food items, candles and other gifts	
Wall 25		Vacant	\$50
Wall 26 And Booth 27	Spunky Skunk	Spunky bright colored gift items including serving pieces, linen napkins and towels, and other brightly colored gift items	\$280
Wall 29	JT's Collectibles	Gift items hand made by the owner	\$30
Booth 30	Cottage	Soaps, lotions, and small home accessories	\$220
Wall 32		Vacant	\$40
Booth 33		Vacant	\$250
Booth 34	LOGO	Embroidery and monogramming items	\$130
Wall 35	РСЈ	A collection of elegant handbags	\$42
Booth 36	Soiree	Local and state food delicacies and serving pieces	\$300
Booth 37	Collectibles Unlimited	Collections of furniture, original pottery and home accessories	\$300
Booth 38	Book Bugs	New and gently used book collection	\$360
Booth 39	NAF Interiors	Collections from the travels of a local interior designer	\$300
Booth 40	Vacant		\$240
Booth 41	Nancy's Jewels	A collection of affordably priced jewelry	\$240
Booth 42	Miss Joni's	A collection of gift items including those with a collegiate theme	\$360
Booth 42	Lyndee's	Original pearl jewelry designed and created by the owner along with imported children's clothes	\$480
Booth 42	Erwin's	Antique furniture, lamps, antique book, and home accessories	\$390

AUTHORS' NOTE

The names in this case have been disguised.

STOLEN DATA AND FRAUD: THE HANNAFORD BROTHERS DATA BREACH

Danial L. Clapper, Western Carolina University

CASE DESCRIPTION

The primary subject matter in this case is an in-depth look at one of the most well known data breach victims of 2008: the Hannaford Brothers grocery chain. This case can be used as a short case illustrating how an organization can become a data breach victim, the type of data criminals are interested in stealing, how they use stolen data to commit fraud and the possible legal consequences of allowing confidential information to be stolen.

To facilitate a more in-depth analysis if desired, the case and discussion questions are grouped into the following dimensions: Credit card data and processes, Credit card fraud and Identity Theft, Technical details of how the criminals accomplished the data theft and the legal aspects of the lawsuits that resulted from the data breach. Any or all of these dimensions can be explored in more depth by either the entire class or different student groups.

The basic case has a difficulty level of one or two and is suitable for a general undergraduate business course. With a deeper exploration of one or more of the above dimensions the case could be used to better understand criminal data theft and fraud in an upper-level accounting or finance course. More time spent on how the data was stolen would be appropriate for an information security course, particularly with an emphasis on information technology. It could also be used in a business law or issues course to explore the legal environment surrounding data breaches, customer notification and possible legal consequences of a data breach. The basic case is designed to be taught in three class hours and is expected to require three hours of preparation by students.

CASE SYNOPSIS

Hannaford Brothers Company is a regional grocery company with stores throughout eastern United States. On March 17, 2008 Hannaford Brothers announced that it had been the victim of a malware attack it characterized as "new and sophisticated" which resulted in over 4.2 million credit and debit card numbers being compromised. In every one of its close to 300 grocery stores in Maine, Vermont, New Hampshire, Massachusetts, New York and Florida the malware had intercepted credit and debit card data after the customers swiped their card at the checkout counters. This stolen credit card data was fraudulently used in at least 1,800 cases in the U.S. as well as Mexico, Bulgaria and Italy. On March 19, 2008 an attorney in Maine filed a class-action lawsuit against Hannaford Brothers. Other lawsuits followed shortly.

This case explores one of the most notorious data breaches of 2008-a year which according to one report had more records compromised than the preceding four years combined. Students will learn how the data was stolen, how criminals used the stolen data to commit fraud, the security standards in place to protect data and the results of the lawsuits against Hannaford Brothers.

THE DATA THEFT

The first indication that Hannaford Brothers had a problem came on February 27, 2008 when they were notified by First Data – which handles transactions for Discover and American Express -about a high number of fraudulent charges on credit cards which had previously been used at Hannaford stores (Wickenheiser, 2008). Although Hannaford Brothers had never before been the victim of a data breach, they were now in the middle of an ongoing theft of customer information that would be one of the most publicized of 2008 and ultimately lead to millions of their customers' credit card data being stolen. After being alerted by First Data, Hannaford Brothers notified the Secret Service and assembled a team of over thirty computer forensic experts to find the source of the data leak. At this point Hannaford Brothers had not notified the public and did not know how the data was being stolen. As they were trying to determine how the theft was occurring one thing was very clear: they had to figure it out quickly. The longer they took, the more customer data was being stolen. They had to find out what data was being stolen, how the thieves were stealing it and they had to do it fast.

Since credit card fraud was what alerted them to their ongoing data theft, the store's payment system was examined as a source of the data theft. Each of the Hannaford Brothers and affiliate stores had the same Point of Sale (POS) system architecture. Next to each cashier in the store was a POS terminal with a card reader. When the cashier had rung up all of the items in the order, if the customer wished to pay with a credit or debit card the customer's card would be swiped and their authorization data would travel from the POS terminal to an in-store server and then out to their transaction processor which would authorize the credit card for the purchase. Each store had one server and multiple POS terminals with card readers.

After more than a week of round-the-clock work the Hannaford Brothers forensic team determined that criminals somehow had managed to insert a malware program onto every one of the Hannaford Brothers in-store servers. They had managed to do this for all of the close to three hundred stores distributed throughout the northeast and Florida. The malware program was able to grab the data as it was being sent from the POS terminals to the in-store server as part of the authorization process and then add the data to a cache of stolen data. The malware would then regularly connect with an overseas Internet Service Provider (ISP) and send the most recent batch of stolen customer data out of the United States. This data theft was occurring despite the fact that

Hannaford Brothers had a security firm to monitor its network security and their stores used a modern POS system that should have been secure (in fact, Hannaford Brothers had been featured in a 2005 Computerworld article as an example of a retailer aggressively updating and modernizing their POS system (Hoffman, 2005)).

There were a number of other reasons that Hannaford Brothers described this attack as "new and sophisticated". The first of these is the operating system of the computer the malware ran on. Most of the computers in the world use a Microsoft Operating system, but the malware that stole the data from Hannaford Brothers was designed to run on a computer running the Linux operating system. Although Linux is widely used as a server operating system (OS), only a small percentage of non-server machines run Linux and thus there has been little financial incentive for malware writers to create malware for Linux. This has led some to the conclusion that this malware was custom written and designed specifically for the Hannaford Brothers payment system. The uniqueness of this malware is also reflected in how difficult it was to find and indentify by the computer forensic team: it took a thirty person team of Secret Service and other computer forensic experts --- working around-the-clock -- over a week to find this malware program.

Another unusual aspect of this malware is that the criminals were able to place it on over three hundred servers distributed from Maine to Florida. Speculation about how this was done ranges from an inside job, to malware that moved from one server to the next until it was on all of the servers. But neither Hannaford Brothers nor the Secret Service has publicly detailed how this was achieved and it is possible that neither know. Another unusual aspect of this data breach is that the data was stolen in-transit during the authorization process. A more typical approach used by criminals is to target databases containing credit card data "at rest", i.e., stored in a database – possibly during the daily batching process step. A Gartner report states that the Hannaford Brothers data breach was the first publicized case of sensitive card authorization data being stolen in transit (Litan, March 20, 2008)

Whether at-rest or in-transit, the payment card industry is very concerned about customer data being stolen. To enhance cardholder data security the Payment Card Industry Security Standards Council created the PCI Data Security Standard (PCI DSS). This standard is organized around a number of principles each with one or more requirements. The principles are: Build and Maintain a Secure Network; Protect Cardholder Data; Maintain a Vulnerability Management Program; Implement Strong Access Control Measures; Regularly Monitor and Test Networks; Maintain an Information Security Policy (PCI Security Standards Council, 2008). Under the Protect Cardholder principle there are two requirements: Requirement 3: Protect stored cardholder data and Requirement 4: Encrypt transmission of cardholder data across open, public networks. Since the malware at Hannaford Brothers stole the data in-transit it would appear that this requirement was not met, but public networks refers to external networks such as the Internet. Since the malware was on the server in each of the stores it was able to grab the data in-transit within the private store network. This data (while it was on the private store network) was not required to be encrypted to

be in compliance with requirement 4. Hannaford Brothers was in PCI compliance at the time of the data breach and ironically its compliance was re-certified on February 27, 2008 -- the same day they were originally notified of fraud problems (Kaplan, Hannaford tells regulators how breach happened, 2008).

By March 8, 2008 the company was confident that it had identified the malware that caused the data breach. It replaced all of the system hardware and rechecked the software (Hench, 2008). From a forensic analysis of their customer transactions Hannaford Brothers determined that over 4.2 million customer purchases from December 7, 2007 to March 8, 2008 may have been compromised. But what information precisely had been stolen? To understand the types of fraud that Hannaford's customers faced it was vital to determine the exact data that was stolen – that would determine the types of fraud that criminals could commit with the data.

THE STOLEN DATA

Credit cards contain two different types of storage: visible data on the surface of the card itself (either printed or embossed) and data stored in the magnetic stripe on the back of the card which can only be read by a card reader. The most important data stored on the card itself is the credit card number (Primary Account Number or PAN), which is typically embossed on the card and the CCV2 which is usually printed on the back of the card. The CCV2 is used to help prevent fraud in "Card-not-Present" transactions -- such a purchase on the web – by helping to verify that the customer actually has physical possession of the credit card and not just a stolen credit card number (Visa U.S.A. Inc., 2007).

Hannaford Brothers is a retail grocer so the cards used were in a "Card Present" situation. In this situation the card is "swiped" as the customer pays for the purchase. In this setting, only magnetic stripe data is used for the transaction. As the card is swiped the Point of Sale (POS) terminal's card reader obtains the data it needs from the magnetic strip on the back of the card. The information stored on the magnetic strip is called "Track Data". When the card is swiped the data needed to authorize the purchase is read from the tracks.

In theory there can be as many as three separate tracks, but typically only the first or second tracks are used for a credit card transaction. The key data contained in the tracks are: Track 1 data: Primary Account Number (PAN) – this should be the same as the number that is embossed on the card; Customer Name; and Expiration Date. Track 2 data: Primary Account Number (PAN) – this should be the same as the number that is embossed on the card; and Expiration Date; The tracks may contain additional data, but this is the key data needed for transactions and which must be protected (Wikipedia, Viewed: June 22, 2009).

The simple act of making a purchase with a credit card results in a complicated process involving a surprising number of different entities. The most important entities are: Cardholder, Merchant, Merchant Bank (also called an Acquiring Bank or Acquirer), Card Issuer (also called an

Issuer or Issuer Bank) and Card Association. The Cardholder is the authorized person attempting to use the credit card to make a purchase. The Merchant is the business (authorized to accept the credit card) who wishes to sell the item(s) to the cardholder. The Merchant Bank or Acquiring Bank is the financial institution who the merchant contracted with to accept credit card payments. The Card Issuer is the financial institution that provided the actual credit card to the card holder. The Card Association is Visa, Mastercard, Discover, etc... (Visa U.S.A. Inc., 2007).

The complete process of using a credit card for a purchase is a four step process involving all of these entities that consists of the following: Authorization, Batching, Clearing and Settlement, and Funding. Authorization is the step where the issuer verifies to the merchant that they should accept the credit card for this transaction. In a retail setting like Hannaford Brothers (Card-Present) the authorization process begins when the customer or cashier swipes the credit card and ends when the cashier gets authorization approval and the customer can finish the purchase. In the Batching step all the customer transactions for the day are stored until usually the end of the day when they are submitted for clearing and settlement. During the clearing and settlement step the issuers pay the acquiring bank for the transactions. Finally, in the Funding step the acquiring bank pays the merchant for the transactions. From authorization to the merchant receiving the funds usually takes about three days (Bank of America, 2008).

The Hannaford Brothers forensic examination revealed precisely the data that was stolen during the data breach: Track 2 data from the cards used by the customers during their purchase. Given that the data was stolen during the authorization step, this makes sense because the key data needed for authorization is just the PAN and the amount of the purchase. No other data on the customer cards – either Track 1 or data printed or embossed on the card – was stolen during the data breach. Once Hannaford Brothers knew the exact data that was stolen during the data breach they could begin planning for the type of fraud that was most likely to be used by criminals to profit from the stolen data.

THE FRAUD

The ultimate goal of criminals is to use stolen credit card data to commit fraud. The precise nature of the fraud likely to be committed depends on the specific data stolen. If only credit card numbers (PANs) are stolen, the thieves are limited to credit card fraud and more precisely, Card-Present credit card fraud. A typical scenario for this would be for the criminals to create counterfeit credit cards for each of the stolen credit card numbers and then use these cards in retail stores to purchase merchandise that would later be re-sold to criminal fences or to unsuspecting people on websites such as eBay and Craigslist. If, on the other hand, the stolen data also includes Personal Identifying Information (PII) such as the customer's name, then the fraud possibilities greatly expand from simple credit card fraud to Identity Theft.

The broad definition of Identity Theft was given in the Fair and Accurate Credit Transactions Act of 2003 as: "A fraud committed or attempted using the identifying information of another person without authority". A finer and more useful breakdown of Identity Theft yields the following two categories: Account Takeover and True Name identity theft. In Account Takeover the criminal uses the victim's personal information to take over existing accounts – often changing the mailing address of the accounts so that for a time the victim is unaware of the charges made to their accounts. In the True Name form of identity theft the thief uses the victim's personal information to a time the victim is unaware. Because all billing would be sent to a different address and the victim is unaware of the existence of these new accounts, they represent a significantly greater risk to the victim than the account takeover form of identity theft.

HANNAFORD BROTHERS PUBLIC RESPONSE

By March 8, 2008 Hannaford Brothers are confident that they understand the source of the data breach, the specific data stolen and the types of fraud likely to be committed with the stolen data. On March 10, 2008 they send a list of the compromised customer credit card numbers to the major credit card associations. On March 13, 2008 these credit card associations provide a list of compromised credit card numbers to their member banks – without naming Hannaford Brothers as the source of the data breach. Then on March 17, 2008 after being asked about this incident by Massachusetts officials, Hannaford Brothers general counsel Emily Dickinson delivers a letter to Massachusetts Attorney General Martha Coakley and the Massachusetts Office of Consumer Affairs and Business Regulation disclosing the data breach and some of the details surrounding it. The letter was not released to the public but Hannaford Brothers executives as well as Visa and Mastercard declined comment, but Carol Eleazer, vice president of marketing, acts as a liaison with the press. (Pereira, Corporate News: Data Theft Carried Out On Network Thought Secure, 2008; Naraine, 2008; Kerber, Hannaford case exposes holes in law, some say, 2008);

THE LAWSUITS

Within days of Hannaford publicly disclosing their data breach a number of class action suits were filed on behalf of their compromised customers. These multiple cases were consolidated into one case that was heard in the U.S. District Court in Portland Maine. A key question in the case was what should be the consequences to a company that allows its customer confidential information to be stolen? For at least 1,800 of its customers this theft resulted in the customer's credit cards being used fraudulently. While the rest of the over four million customer's credit cards were not used for fraud they had to bear the time and inconvenience of receiving new credit cards and checking to

make sure their cards had not been used fraudulently. The lawsuit sought damages for this loss of time and money.

The plaintiffs also sought additional damages because they contended that Hannaford Brothers knew about the breach for at least three weeks before notifying its customers, thus knowingly exposing its customers during that time frame to stolen credit card numbers and fraud (Maxwell, Judge to decide if Hannaford data breach should go to trial, 2009).

THE AFTERMATH

On May 12, 2009 the federal judge hearing the Maine District case dismissed all but one of the claims against Hannaford Brothers. Judge D. Brock Hornby ruled that the only claims that could continue were customers who were not reimbursed by their banks for the fraudulent charges – which turned out to be only one customer. The judge ruled that merely being inconvenienced by the data breach (either by having to work with the credit card company to cancel fraudulent charges or by spending time monitoring the card for fraud) did not meet the legal definition of injury that would allow them to have a legal claim against the defendant. The judge wrote that *"There is no way to value and recompense the time and effort that consumers spent in reconstituting their bill-paying arrangements or talking to bank representatives to explain what charges were fraudulent. Those are the ordinary frustrations and inconveniences that everyone confronts in daily life with or without fraud or negligence. Maine law requires that there be a way to attach a monetary value to a claimed loss. These fail that requirement." (Maxwell, Judge tosses all but one Hannaford data breach claim, 2009)*

Although it appears that Hannaford Brothers has avoided a long, costly class action suit from its compromised customers, the cost associated with the data breach are still very significant. Although they are confident they found the malware program that caused the data breach, to be safe they replaced all of the computer hardware. Although some of the forensic team who worked for over a week to uncover the malware were Secret Service experts, others were outside industry people who presumably had to be paid by Hannaford Brothers. Finally, to insure that a data breach of this type doesn't happen again Hannaford Brothers announced that it planned to spend millions of dollars on new technology to upgrade its IT security infrastructure (Vijayan, Paying breach bill may not buy Hannaford full data protection, 2008). On reviewing the intended security upgrades, industry experts said that the changes will exceed the PCI DSS security standards (Kaplan, After breach, Hannaford details IT security remodel, 2008).

DISCUSSION QUESTIONS

1. What data is stored on a credit card?

2.	Which credit card data is used in Card-Present transactions? Which data is used in Card-Not-Present transactions?				
3.	Why is some of the data printed on the card and some of it stored in the magnetic stripe?				
4	Describe the credit card authorization process and the entities involved.				
5.	How does the type of data stolen determine the types of fraud it can be used for?				
6.	What type of fraud could the stolen Hannaford Brothers data be used for?				
7.	How was the data stolen in the Hannaford Brothers data breach?				
8.	Hannaford Brothers described the cause of their data breach as a "new and novel" approach.				
	Why?				
9.	Describe the PCI standard requirements that are most relevant to the Hannaford Brothers				
	breach. Was Hannaford Brothers in compliance with these requirements?				
10.	In their public statements about the data breach, why did Hannaford Brother emphasize than no personal identifying information had been compromised?				
11.	Although Hannaford Brothers compromised payment card data for over four million				
	customers, the Maine district course judge dismissed the class action suit before it could go				
	to trial. Why?				
12.	Did Hannaford Brothers negligence lead to the data breach? Why or why not?				
	REFERENCES				
	REFERENCES				
Bank	of America. (2008). Card Processing Basics. <i>BankOfAmerica.com</i> , Retrieved July 1, 2009, from http://www.bankofamerica.com/small_business/merchant_card_processing/index.cfm?template=card_proce ssing_basics.				

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- Claburn, T. (2008, April 1). Hannaford Data Breach Blamed On Malware. *Information Week*, Retrieved July 1, 2009, from http://www.informationweek.com/news/security/showArticle.jhtml?articleID=207001073.
- Gallagher, N. (2008, March 20). Data stolen from Hannaford during transit. *Portland Press Herald Maine Sunday Telegraph*, Retrieved July 1, 2009, from http://pressherald.mainetoday.com/story.php?id=176693.
- Hench, D. (2008, April 6). Much remains a mystery in analysis of Hannaford security breach. *Portland Press Herald Maine* Sunday Telegraph, Retrieved July 1, 2009, from http://pressherald.mainetoday.com/story.php?id=179920&ac=.
- Hoffman, T. (2005, January 21). Grocer rings up savings with Linux cash registers: Hannaford says the new POS systems boost productivity. *Computerworld*, Retrieved July 1, 2009, from http://www.computerworld.com/softwaretopics/software/apps/story/0,10801,99344,00.html.
- Kaplan, D. (2008, April 2003). After breach, Hannaford details IT security remodel. SC Magazine, Retrieved July 1, 2009, from http://www.scmagazineus.com/After-breach-Hannaford-details-IT-security-remodel/article/109341/.

Journal of the International Academy for Case Studies, Volume 16, Special Issue, Number 1, 2010

- Kaplan, D. (2008, April 1). Hannaford tells regulators how breach happened. *SC Magazine*, Retrieved July 1, 2009, from http://www.scmagazineus.com/Hannaford-tells-regulators-how-breach-happened/article/108569/.
- Kerber, R. (2008, March 28). Advanced tactic targeted grocer. *The Boston Globe*, Retrieved July 1, 2009, from http://www.boston.com/news/local/articles/2008/03/28/advanced_tactic_targeted_grocer/.
- Kerber, R. (2008, March 18). Grocer Hannaford hit by computer breach. *The Boston Globe*, Retrieved July 1, 2009, from http://www.boston.com/business/articles/2008/03/18/grocer_hannaford_hit_by_computer_breach.
- Kerber, R. (2008, March 30). Hannaford case exposes holes in law, some say. *The Boston Globe*, Retrieved July 1, 2009, from http://www.boston.com/business/articles/2008/03/30/hannaford case exposes holes in law some say/.
- Krebs, B. (2009, April 15). Glut of Stolen Banking Data Trims Profits for Thieves. *The Washington Post*, Retrieved July 1, 2009, from http://voices.washingtonpost.com/securityfix/2009/04/glut of stolen banking data tr.html.
- Krebs, B. (2008, May 14). Three Charged With Hacking Dave & Buster's Chain. *The Washington Post*, Retrieved July 1, 2009, from http://voices.washingtonpost.com/securityfix/2008/05/three_charged_with_hacking_dav.html.

Liberty Alliance Project. (2005). Identity Theft Primer.

Litan, A. a. (March 20, 2008). Hannaford Case Shows Need for End-toEnd Card Data Security. Gartner Inc.

- Maxwell, T. (2009, April 2). Judge to decide if Hannaford data breach should go to trial. *Portland Press Herald Main Sunday Telegraph*, Retrieved July 1, 2009, from http://pressherald.mainetoday.com/story.php?id=248452.
- Maxwell, T. (2009, May 13). Judge tosses all but one Hannaford data breach claim. *Portland Press Herald Maine Sunday Telegraph*, Retrieved July 1, 2009, from http://pressherald.mainetoday.com/story.php?id=256153&ac=PHbiz.
- McGlasson, L. (2008, April 4). Hannaford Data Breach May be 'Tip of the Iceberg'. *BankSecurity.com*, Retrieved July 1, 2009, from http://www.bankinfosecurity.com/articles.php?art_id=810.
- Naraine, R. (2008, March 28). Targeted Malware Used in Hannaford Credit Card Heist. *Eweek*, Retrieved July 1, 2009, from http://www.eweek.com/c/a/Security/Targeted-Malware-Used-in-Hannaford-Credit-Card-Heist/?kc=EWKNLSTE040108STR5.
- PCI Security Standards Council. (2008). Payment Card Industry (PCI) Data Security Standard, Version 1.2. PCI Security Standards Council.
- PCI Security Standards Council. (2008). Payment Card Industry (PCI) Data Security Standard: Requirements and Security Assessment Procedures Version 1.2. PCI Security Standards Council.
- Pereira, J. (2008, March 18). Chains Report Stolen Card Data. Wall Street Journal, p. B. 4.
- Pereira, J. (2008, March 31). Corporate News: Data Theft Carried Out On Network Thought Secure. *Wall Street Journal*, p. B4.

- Sharp, D. (2008, March 17). Hannaford supermarket chain reports data breach. *The Boston Globe*, Retrieved July 1, 2009, from http://www.boston.com/business/articles/2008/03/17/ hannaford supermarket chain reports data breach/.
- United States Government Accountability Office. (2007, June). Personal Information: Data Breaches are Frequent, but Evidence of Resulting Identity Theft Is Limited; However the Full Extent is Unknown. *GAO Report*, pp. 13-14.

Verizon Business RISK team. (2009). 2009 Data Breach Investigations Report. Verizon.

- Vijayan, J. (2008, March 20). Hannaford hit by class-action lawsuits in wake of data-breach disclosure. *Computerworld*, Retrieved July 1, 2009, from http://www.computerworld.com/action/article.do?command =viewArticleBasic&articleId=9070281.
- Vijayan, J. (2008, April 28). Paying breach bill may not buy Hannaford full data protection. *Computerworld*, Retrieved July 1, 2009, from http://www.computerworld.com/action/article.do?command =viewArticleBasic&articleId=317307.
- Visa U.S.A. Inc. (2007). Rules for Visa Merchants -- Card Acceptance and Chargebook Management Guidelines. Visa U.S.A. Inc.
- Wickenheiser, M. (2008, April 23). In wake of breach, Hannaford steps up security. *Portland Press Herald Main Sunday Telegraph*, Retrieved July 1, 2009, from http://pressherald.mainetoday.com/story.php?id=183271&ac=&pg=1.

Wikipedia. (Viewed: June 22, 2009). Magnetic Stripe Card. http://en.wikipedia.org/wiki/Magnetic_stripe_card.

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