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LETTER FROM THE EDITOR

Welcome to the *Journal of the International Academy for Case Studies, Special Instructors' Edition.* The International Academy for Case Studies is an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The purpose of the IACS is to encourage the development and use of cases and the case method of teaching throughout higher education. The *JIACS* is a principal vehicle for achieving the objectives of both organizations. The editorial mission of this journal is to publish cases in a wide variety of disciplines which are of educational, pedagogic, and practical value to educators.

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

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

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

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CASE NOTES

EASYCAR.COM: STRATEGIC SERVICE SYSTEM DESIGN

John J. Lawrence, University of Idaho & Instituto de Empresa
Luis Solis, Instituto de Empresa

CASE DESCRIPTION

The primary subject matter of this case concerns concepts relating to operations strategy and service system design. Secondary issues examined include the application of production line approaches to service, service quality concepts, and the value of demand management systems to the firm. The case has a difficulty level of four/five. The case was written for an MBA level introductory operations management class. It is also suitable for use in operations strategy or service operations management courses, at either the MBA or senior undergraduate level. The case has been designed to be taught in 75 minutes and is expected to require about two hours of outside preparation.

CASE SYNOPSIS

This case describes the situation faced by easyCar.com at the start of 2003. EasyCar is the low priced European car rental business founded by easyJet pioneer Stelios Haji-Ioannou. EasyCar had just reached breakeven in 2002 on sales of £27 million, and had as its goals to reach sales of £100 million and profits of £10 million by the end of fiscal year 2004 in order to position itself for an initial public offering. To do this would require opening new locations at a rate of two per week and expanding its fleet of rental cars from 7000 to 24,000. The case describes the company's processes and facilities as well as its pricing and promotional strategies. It also describes a number of significant changes that the company has made in the last year, including a move to allow rentals for as little as an hour that was designed to position easyCar as a competitor to local taxis, buses, trains and even car ownership. The case also explores several legal challenges the firm faced, including a ruling that threatened one of the core elements of its business model. Students are asked to evaluate easyCar's operations strategy and assess the likelihood that easyCar will be able to achieve its ambitious goals.

INSTRUCTORS' NOTES

Recommendations for Teaching Approaches

The case has been written primarily to illustrate concepts relating to operations strategy and service process design. Specific concepts that the case can be used to illustrate include:

How to align a company's operations strategy with its business strategy (i.e., low price market strategy supported by processes, procedures and systems totally focused on achieving low cost), and how to use the concept of order winning criteria to facilitate linking process design decisions to the firm's operations strategy (Hill, 1999).

How to apply production line approaches to a service through standardization, the use of technology, and the reduction of the discretionary actions of employees (Levitt, 1972).

Why a low cost service does not necessarily imply a low quality service to the consumer. The case provides a good illustration of Parasuraman, Zeithaml and Berry's (1985) service quality model and the notion of service quality relating to customer perceptions compared to customer expectations.

How services differ from manufactured products (i.e., intangibility, perishability, heterogeneity and simultaneity), how services differ from each other, and how the characteristics of a given service influence the design of the service delivery process (i.e., relative focus given to physical facilities and policies, employee behaviors and employee judgment).

How the customer can be designed into the service delivery process (i.e., so that they are performing a portion of the service delivery).

How valuable sophisticated forecasting and demand management systems can be to a firm and how process details can be designed to aid forecasting and capacity planning efforts (e.g., early bookings, no cancellations).

The discussion questions that follow were written so that the instructor can simply walk the class through the questions in sequence. This takes the class basically through a discussion of different order winning criteria that a rental car company might choose to compete on (cost, quality, flexibility) and looks at easyCar's processes, policies and procedures with respect to these possible order winning criteria. Questions 5 and 6 are designed to either further reinforce the lessons of questions 1-4 or to test students understanding of the ideas discussed in these earlier questions. Some instructors may wish to assign only questions 1-4 and 7 and integrate the important discussion points from questions 5 and 6 into questions 2 and 3. Question 7 is designed to help bring closure to the discussion and emphasize to students that the success of easyCar's operations strategy will depend in part on how well it can implement the strategy during a period of rapid growth.

DISCUSSION QUESTIONS

1. What are the characteristics of the car rental industry? How do these characteristics influence the design of service delivery processes in this industry in general?

This first question is intended to have students think about the nature of the industry that easyCar competes in and the nature of car rental services in general. This will help students better understand and distinguish between actions taken by easyCar's that are related to the nature of the industry and service and those related to easyCar's strategy.

Perhaps the best way to start the discussion is by looking at the general characteristics of services and which of these characteristics are most significant in the case of car rentals. In general, services are characterized by their intangibility, perishability, heterogeneity and simultaneity. But different services vary significantly in the extent to which these characteristics hold.

Intangibility - While strictly speaking, the "service" of car rental is intangible, given the physical nature of the rented vehicle, it really is not as intangible as many other services in the sense that the consumer can see and touch the rented vehicle. For the vast majority of the period during which the customer uses the service of car rental, the physical car is the service provided. For many services, intangibility makes it very difficult for the consumer to judge quality and for the producer to control quality. This is not nearly as difficult a proposition in the case of car rental. The "convenience" factor (e.g., location, speed of pick-up and drop-off, etc.) associated with rental is the most significant intangible associated with rental cars.

Perishability - Car rental is clearly a very perishable service. If a day goes by and a car is not rented, the opportunity to generate revenues from that unrented time is lost forever. Perishability is a critical factor in the rental industry given the generally high fixed cost associated with the service (i.e., a fleet of vehicles). All industry players must cope with this perishability and different companies will have somewhat different strategies for dealing with it.

Heterogeneity - Car rental is not a particularly heterogeneous service, as compared, for example, to the services provided by a doctor, an architect, a lawyer or a hairdresser. While customers may request different vehicles or different extras (e.g., child seat, ski rack) or different rental terms (return with empty or full tank, unlimited miles, etc.), the majority of customers will receive exactly the same service - the use of a vehicle for some specified period of time. Further, the basic interaction or contact that employees of the rental car company have with customers is going to be very similar.

Simultaneity - The issue of simultaneity is not a major issue for the car rental industry. The service being provided by the car rental industry is the use of a vehicle in a location where the customer both needs one and does not have one (i.e., typically when the customer is travelling). While there is simultaneity in the sense that the customer and the vehicle are together during the time that the service is consumed, most of the process of creating the service (e.g., creating the facilities, arranging for the right car to be in the right place) is done without the customer in the process. The customer only interacts with the service organization when booking the vehicle and when picking up and returning a vehicle. While these interactions are important, they do not limit the ability to achieve economies of scale in the industry the way simultaneity does in some other industries.

Service design has been characterized as having three basic components - (i) physical facilities, processes & procedures, (ii) employee's behaviors, and (iii) employee's professional judgement. Given that car rental service is a relatively tangible, homogenous service with fairly low levels of customer contact (i.e., simultaneity), rental companies tend to focus their service design on the physical facilities, processes and procedures. While employees' behaviors are not unimportant, they are of secondary importance to facilities, processes and procedures in service design in the car rental industry. This can be seen industry wide.

2. EasyCar obviously competes on the basis of low price. What does it do in operations to support this strategy?

Once the student understands the characteristics of the car rental industry from a service design perspective, the discussion can move to how easyCar's operational design allows it to compete on the basis of price. Given the extent to which easyCar has designed its process to reduce cost, students should not have a difficult time identifying the features of its process design that allow it to offer a lower price. The key point to drive home is the extent that easyCar has gone to align its operations strategy and process design with its business strategy. Clearly the order winning criteria in this case is low price. (see Terry Hill's

Manufacturing Strategy textbook for more on the concept of the order winning criteria in operations strategy).

Perhaps the best way to make this point is to explicitly compare easyCar's operations with the operations of a traditional car rental company. Exhibit TN-1 shows this comparison. After having gone through this comparison, the instructor can ask students why all rental car companies don't follow easyCar's lead and reduce their costs in this manner. Doing this drives home the link between the operations design and the business strategy - that is, the traditional car rental companies have strategies focused more on flexibility and service, and as such have different order winning criteria and different operational designs to support these criteria. (An alternate way to ask this is to ask what easyCar gives up to achieve this low cost, although discussion questions 3 & 4 are really designed in part to get at this issue).

Exhibit 1

	easyCar.com	Traditional car rental
Location	Secondary locations and nearby prime locations in some cases. Frequently near train and bus stations, where budget travelers are often found and where rents are typically lower. Even when near an airport, rarely at the airport complex given the high cost of these locations.	Prime locations. At most or all major airports, within the airport complex.
Facilities & Equipment	Small, simple facilities to help keep costs down. Often a simple structure inside a parking garage. Fleet consists of one type of vehicle per site. This simplifies the tasks for the maintenance and customer service staff and makes it much easier to achieve a high utilization rate as all vehicles are substitutable for each other. Customers limited to 100 km per day free to limit depreciation of fleet value.	Generally larger, more nicely decorated, stand alone facilities to promote image. Fleet features a wide range of vehicles. Customer frequently allowed to drive unlimited miles.

Exhibit 1		
	easyCar.com	Traditional car rental
Process	Customer designed into the process and required to do certain tasks traditionally done by the company (or charged a higher fee for the services). Customer expected to print out the service contract and bring it with them, fill the car with fuel, and, most significantly, clean the car prior to returning it so that it is in ready-to-rent condition when they return it. All of these reduce easyCar's costs. Technology used extensively in the booking process to replace people, again reducing labor costs. Process very standardized, with few extras.	Customer has little involvement in the process except to re-fill the gas tank before returning the vehicle. Customer has numerous options to book the vehicle, include company toll free numbers, company websites, and traditional travel agents. Frequently customer has options, like one-way rentals and pick-up or delivery, although usually for an added fee.
Scheduling	Very tightly scheduled (to the hour for pick-up & drop-off), and customer is expected to adhere to the schedule or incur significant penalties. Once service is scheduled, only limited changes are permitted, making planning easier and helping easyCar achieve high utilization and operate at minimal staffing levels.	Flexible. Customers often charged normal rates for keeping vehicle beyond originally scheduled return time. Customers permitted to change or cancel reservations without penalty.
Capacity	Aggressive use of pricing to insure high capacity utilization. Expectation that capacity utilization will approach 100%, and on average exceeds 90%. Capacity added only when its clear it will be utilized most of the time.	Use price to increase capacity utilization, but only to a certain extent (e.g., industry leader Avis Europe utilization at 68%). Expect to have excess capacity at many off-peak times. Capacity added to satisfy peak demand periods.

Finally, once the components of the easyCar operations systems have been brought out, they can be used to make the point that many of the methods that easyCar uses can be thought about as applications of production line approaches applied to a service context. This point is particularly worth making if students have been assigned to read Levitt's (1972) "Production-line approach to service". The easyCar situation clearly illustrates the ideas of service standardization, reducing the discretionary action of employees and using technology to support or substitute for people in the process.

3. How would you characterize the level of quality that easyCar provides?

Asking students about quality is a logical follow-up to the previous question focused on cost. Discussing quality is important so students see that low cost does not necessarily imply low quality in the minds of the customer. The discussion can also be used to illustrate several important service quality concepts.

One way to begin this discussion is to ask what is quality in this case in the mind of the consumer. Clearly easyCar is targeting a particular segment of the market that is very price conscious, but the students should recognize that "quality" in the consumers' minds is more than simply a low price (or alternatively, the needs of this segment is more than simply low price). The idea of value as a concept relating both quality and price can be introduced here, with value equating to the benefit of the service provided relative to the price paid. This discussion can also be used to introduce Garvin's eight dimensions of quality as a way to better understand the multidimensional nature of quality. Garvin's dimensions are: performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality. EasyCar's customers would likely define quality in terms of the basic functionality (i.e., core performance benefit) of the vehicle rented, the reliablity of the vehicle rented, and the conformance of easyCar processes to the specifications provided on the easyCar web site (across all locations).

The instructor can next ask students why easyCar started with a fleet of Mercedes A-class vehicles (or students may raise the issue in the context of aesthetics from the discussion of Garvin's dimensions). This choice seems inconsistent with easyCar's positioning as a low cost provider, and indeed the company has recently switched and is now using more Vauxhall Corsas and similar vehicles. The key to understanding the launch of easyCar with the more expensive Mercedes is that easyCar did not want to be perceived as a low quality service provider (this comes through in the quote in the case from Stelios about not compromising on the hardware). The importance of the Mercedes A-class is not just for the current customer. Since a major advertising strategy of easyCar is to put its name in bold orange lettering on all its cars, the Mercedes A-class vehicles are likely to be more positively perceived by those who see the vehicle and the easyCar advertising. EasyCar wants to create an image of reliability that a fleet of new Mercedes might imply (as opposed to being associated with other very low-price rental car companies that often rent older vehicles).

In addition to understanding meanings of quality, the case provides an excellent opportunity to discuss the issues of dealing with service quality in particular. For many services, quality is particularly difficult to deal with because of the intangibility, heterogeneity, and simultaneity of the service. These features of a service typically make it difficult to specify and maintain quality standards. Because car rental is not as intangible or heterogeneous as many services, and the simultaneity is associated primarily with the facilitating good, quality standards are not as difficult to establish or maintain. What is more relevant to the easyCar case is the research indicating that consumers evaluate the quality of a service largely by comparing the perception they have after receiving the service with the expectations they had in advance for the service. Parasuraman, Zeithaml, and Berry's (1985) service quality model can be introduced at this point to drive home this idea. EasyCar is good example of an application of this model. EasyCar now goes to great lengths on their website to communicate exactly what customers will receive and what they will not receive. The reason that easyCar does this is to manage its customers' expectations regarding the service (gaps 4 & 5 in the Parasuraman, Zeithaml and Berry model). When easyCar was launched, it experienced some bad press as a result of customers who did not fully understand the easyCar approach. EasyCar does not want customers to be surprised by any of the features of its service that are different than traditional car rental companies, as such surprises would have a negative impact on the customer's perceptions of service quality.

4. Is easyCar a viable competitor to taxis, buses and trains as Stelios claims? How does the design of its operations currently support this form of competition? How not?

EasyCar sees itself as a potential competitor to taxis and buses because it allows customers to rent a vehicle for as little as one hour. From easyCar's position, this makes sense as part of their effort to achieve maximum utilization of their fleet. If they can rent out a car for even an extra one or two hours when the vehicle would otherwise sit in a garage unused, then it adds to their bottom line. Further, it is possible that such very short term rentals seem most likely to come during the work week, a traditionally slower period for easyCar given its primary appeal is to leisure travelers who demand vehicles more on weekends than on weekdays. In this way, the very short-term rentals may help balance out demand on a weekly basis.

EasyCar's change to allow rentals for as little as one hour provides a good opportunity to discuss the issue of the flexibility of EasyCar's processes. The easyCar process is flexible in that it allows customers to choose exact pick-up and drop-off times and pay for only that time. Traditional rental car companies charge by 24-hour periods and for a minimum of one day. Further, easyCar charges customers for each individual service that they use (e.g., cleaning the car, extra kilometers), allowing customers to pay only for the services that they require. This flexibility really revolves around prices. In two cities, easyCar also offers flexibility in terms of location. Fully half of easyCar's rental sites are in either London or Paris.

The question is whether these forms of flexibility are sufficient to make rentals of a couple of hours appealing to customers. There are several significant limitations from the customer's perspective that will likely limit easyCar's ability to attract these customers. First are the preparation fees or activities that the customer will have to pay and/or engage in to rent the car. There is a €4 standard preparation charge and a €5 charge if the customer uses a standard credit card to pay for the rental. Then the customer may have to wait once arriving at the easyCar location to collect their car if there is a queue of other customers, which as the case indicates can occur, particularly during peak times, because of the minimum staffing levels maintained at each location. Once the customer picks up the car, he or she will then have to put gas in the car before it is ready to go. When the customer returns the car, he or she needs to wash the car or pay the €16 cleaning fee, and must again potentially wait to return the car. This all amounts to a significant investment in time or money to rent for a couple of hours. The second limitation is that easyCar's prices typically increase as the time of the rental period draws near, particularly during peak periods. While a few customers may know well in advance that they need a vehicle for only a couple of hours on a given day, it would seem that this market segment is likely to buy more at the last minute. This makes the price somewhat less competitive. Obviously easyCar can factor this into their pricing model, so that if a customer does want a car for a short term period on short notice and the vehicle is available and would likely go unrented, then the system can quote the customer a reasonable price. However, this raises a third limitation, which is that frequently easyCar will not have a vehicle on such short notice, as they currently achieve 90% utilization of their fleet. If a customer frequently finds no vehicles available, at some point he or she will stop bothering to check and simply use the alternatives.

The point to make is that most of easyCar's processes are tailored much more to the customer who knows his or her travel plans well in advance and has the extra time to go to a secondary location and perform some of the traditional service themselves. This does not seem compatible with the renter who might want to use the easyCar for an hour or two on short notice instead of taking one or a couple of taxi rides. For easyCar to successfully compete for such customers may require changes to its service process. Such changes might include, for example, a relaxation of cleaning policies (e.g., the exterior is free from mud, grime, etc. rather than evidence that the car has been washed) and some type of automated drop off system to reduce the time factor for customers.

Having many locations in the same city also clearly makes easyCar a more viable competitor to taxis, buses and car ownership. This has significant implications to easyCar's expansion strategy. If it truly wants to compete against taxis, buses and car ownership, it will focus its expansion on opening multiple locations in the major European cities. If it sees itself more as competing for tourist customer, it will open more locations in tourist destination locations, either near airports or train and bus stations.

5. What are the operational implications of the changes made by EasyCar.com in the last year?

A total of five recent changes are identified in the text that easyCar has made in the last year. Discussing some or all of these is designed to reinforce some of the proceeding lessons as well as further highlight some of the trade-offs that the company must deal with in its efforts to compete based on cost. The discussion can also be used to emphasize that all companies, regardless of what their competitive priorities are, must still seek continuous improvement in their methods.

Rental by the Hour - This would have been discussed in detail in the preceding question.
Introduction of vehicles other than the Mercedes A-Class - Perhaps the most interesting change that easyCar made, other than allowing rentals of only an hour, was to move away from its one car model and offer a number of different, although generally similar, vehicles at its different locations. The case indicates that the change was made to keep pressure on suppliers (i.e., the automobile manufacturers) to keep costs down and to in turn be able to lower the price of a rental to customers. What is perhaps surprising in the change is that easyCar went from having one vehicle type to having five vehicle types. Part of the operational benefits of a single fleet is site specific. Any car can go to any customer and significant economies of scale would exist in the maintenance of the fleet. However, having different vehicles at different locations reduces easyCar's flexibility to shift vehicles between locations easily if demand is greater at one location than at another. This is particularly an issue in shifting vehicles between Mercedes and non-Mercedes locations. Customers who have paid a few euros extra a day to rent from a location that offered the Mercedes vehicles would likely be disappointed if they showed up to pick up there vehicle and were given a Renualt Clio or Ford Focus. So operationally, what easyCar has done with this change is to lower its cost some, but at the expense of some operational flexibility. The long term question related to this is whether customers will develop preferences for specific vehicles and how easyCar will deal with this on the market side of things. This situation can also be used to introduce extending operations strategy issues to the supply function. Clearly the move by easyCar pushes their vehicle suppliers to offer competitive prices, although it moves easyCar away from a supplier partnership models intended particularly to improve quality and flexibility along the supply chain.

Clean Car Policy - This changes is clearly very consistent with easyCar's low cost strategy. Basically it represents a transfer of a task traditionally done by the company to the customer. Operationally, it has several implications. It reduces the need for staff at the rental site, helping easyCar reduce one of its costs. More significantly, perhaps, it also speeds the turnaround of a vehicle. That is, this policy, combined the empty fuel policy, means that most vehicles are returned in a condition that allows them to be immediately rented to the next customer. This helps easyCar maintain a very high fleet utilization. But what is also interesting operationally is that it makes the employees' task somewhat less predictable. Whereas with the old policy employees knew they would have to clean each vehicle, and they knew how many vehicles were coming back each hour, with the new policy there is an additional element of uncertainty in the process because an occasional car will need to be cleaned. This may mean that one or more customers may have to wait at the easyCar site while the employee cleans such a vehicle. This is particularly an issue at sites which are staffed by a single employee. It is worth mentioning that the change in policy on the operational side has a real impact on the market side as well. The policy lowers the price to customers willing to take the time to wash the car by €7 (i.e., through reduction of the vehicle preparation charge from €11 to €4) while increasing the price of the vehicle to customers not willing to wash the vehicle by €9 (i.e., such customers now pay a €4 preparation fee + a €16 cleaning fee instead of the previous €11 preparation fee). EasyCar is likely to pick up some new, price sensitive customers by the €7 reduction in price. However, for customers who don't want the inconvenience of cleaning the vehicle, the €9 price increase may push some of them toward traditional rental car companies.

Empty-to-Empty Policy - This change, like the previous one, is clearly consistent with easyCar's low cost strategy. Operationally, the empty-to-empty policy would seem to significantly reduce the chance that an easyCar employee would have to deal with the gas level. Previously, customers had to worry about taking the time to fill the tank. Customers running late might skip this step to save time, leaving the task for an easyCar employee. With the new policy, the gas can be at any level as long as the low fuel indicator light is not on. Since most drivers are unlikely to allow the gas level in their vehicles to drop this low anyway, the chance that an easyCar employee would have to deal with putting gas in the car is small. Combined with the previous change, this policy basically means the vast majority of customers bring their car back in a condition that allows it to be immediately re-rented.

Requiring Customers to Purchase Insurance - This policy change probably has greater implications on the marketing side than on the operations side. Operationally, however, it greatly reduces the likelihood of conflict between customer and easyCar employee when a customer returns a damaged car. Previously customers who did not purchase the optional insurance had some liability, and the employee on duty would have to sort this out with the customer. This can be a timely process, and present difficulties particularly for a location staffed by only one person. Such incidents would likely cause delays for other customers attempting to pick up or return cars at the same time.

6. How significant are the legal challenges that easyCar is facing?

Clearly the OFT ruling against easyCar is much more significant than is the posting of the pictures of renters with overdue vehicles. Discussing the OFT ruling against easyCar is designed primarily to reinforce the cost benefits gained from easyCar's demand management system and its high utilization rates it achieves. According to the quote by Stelios, allowing customers 7 days to change or cancel reservations without penalty would cause utilization to fall from 90% to 65% and prices to triple. While these estimates are in all likelihood an overly pessimistic assessment of the impact, the impact none the less would be significant given the central role yield management plays in easyCar's approach. Further, it is worth using Stelios' estimates to give students a better feel for the significance of the high utilization rate that easyCar achieves. At a 90% utilization rate, easyCar would have (0.9)(24,000) = 21,600 vehicles rented out at any given time by the end of 2004 if its growth goals are realized. To have the same number of vehicles on rent at the end of 2004 with a 65% utilization rate would require a total fleet of 33,200 (21,600/0.65) or a 38% larger fleet than currently planned. Further, current easyCar facilities rent as few as 15-20 spaces in a parking garage to operate a fleet of 150 cars. To service the same number of customers out of a location at a 65% utilization rate would require a fleet of 208 (0.9*150/0.65) vehicles and an absolute minimum of 72 (208*(1-0.65)) spaces to park un-rented vehicles. Students could be asked what would happen to easyCar's hoped for £10 million profit if it had to purchase an additional 9,000 vehicles and quadruple the size of all of its facilities. Going through this analysis and asking students to think about and calculate the impact on profits should drive home the cost savings achieved from the high utilization rate.

The other legal challenge easyCar faces deals with its posting of the pictures of customers with overdue vehicles. This is not as significant, both because its impact is not as great and because no legal action has yet been taken. The value of including this in the case, and possibly in the discussion, is two-fold. First, it indicates to students the significant cost of this problem to the rental car industry. Second, it illustrates that basically a "zero mistakes" process must exist for implementation of this policy to minimize the chance of any legal claim against the firm.

7. What is your assessment of the likelihood that easyCar will be able to realize its goals for 2004?

This question is really intended to bring closure to the discussions. The established goals, a quadrupling of sales from £27 million to £100 million via the opening of 130 new locations in the next two years while realizing a £10 million profit are certainly ambitious. It is worth noting that easyCar's operational model certainly makes opening new locations easier than for traditional rental car companies, given the minimum facilities required and the creation on the part of easyCar of vans with all the equipment needed to run a location. The bottlenecks for expansion more likely rest with hiring and training all of the employees to staff these locations, as well as providing sufficient marketing support to launch 130 new locations on a minimum marketing budget. The greater challenge operationally will be to continue to find ways to drive costs down while maintaining customer satisfaction so that it can realize profits at the same time.

USE IN A STRATEGIC MANAGEMENT CLASS

The case, as written, could also be used in a strategic management class to discuss or illustrate how functional strategies need to be aligned with corporate strategies, how a low cost strategy is implemented, and what constitutes a durable competitive advantage. The following questions are suggested as possible discussion questions for using the case in a strategic management class. Questions 1-4 and 7 are very similar to those described above, only broadened somewhat to better fit a strategic management (as opposed to an operations management) course. Questions 5 and 6 are unique and are intended to point students toward important strategic management concepts. In relation to a strategic management class, the idea of strategic groups could be included in the discussion of question #1 (with a strategic group map being built along dimensions of price and service/quality). Discussion of question #2 can be broadened to include issues relating to finance (e.g., customers paying in advance has a big impact on cash management) and marketing (e.g., advertising on the side of the car, posters in subway, bus & train stations). Question 5 is intended to highlight that process innovation can be as or more important than product innovation in creating competitive advantage. Question 6 allows for a discussion of how a company goes about achieving a durable competitive advantage and whether or not easyCar.com's strategy and actions are consistent with creating a durable advantage. The strategy easyCar.com is pursuing is likely to be at least somewhat durable because the rental car industry is not terribly dynamic, the major competitors are unlikely to try to imitate its strategy because of prior strategic commitments, and easyCar.com's advantage is built around process innovation is not always easy for a competitor to copy.

1. What were the characteristics of the car rental industry that made it attractive to Stelios?

2. EasyCar obviously competes on the basis of low price. What does it do across the business to support this strategy?

3. How would you characterize the level of quality that easyCar provides? How would you characterize the level of customer responsiveness that easyCar provides?

4. Is easyCar a viable competitor to taxis, buses and trains as Stelios claims? How does the design of its operations currently support this form of competition? How not?

5. It has been argued that innovation is the single most important building block of competitive advantage. Does that appear to be the case for easyCar? Why or why not?

6. Your textbook authors discuss the durability of competitive advantage. Based on your textbook authors' perspectives, is easyCar's competitive advantage durable?

7. What is your assessment of the likelihood that easyCar will be able to realize its goals for 2004?

EPILOGUE

In March of 2003, easyCar had announced that it was going to make as many as 12,000 vehicles available from unmanned pick up points by the end of 2004 through the use of car clubs. EasyCar had started testing the technology at one of its locations in London in the spring of 2003. Customers would still reserve a car via the internet, then call on their mobile phone when they arrived at the vehicle. EasyCar operators would then unlock the car remotely using mobile technology connected to the vehicles locking system. Customers would then get the keys from the glove box and be on their way. EasyCar was going to allow only customers who proved trustworthy through the hire of cars from ordinary locations to use the club vehicles, and there would be no preparation fee associated with the club vehicles. (Mackintosh, J. "EasyCar plans unmanned rental pick-up," *Financial Times*, 03 March 2003, pg 4).

By June of 2003 easyCar had 53 locations open (up from 46 in January, 2003) and had reached a fleet size of 8000 vehicles. This was well off its desired pace of opening two new locations a week. In July of 2003, easyCar admitted that its expansion and profitability goals were not being achieved. It cut its workforce from 150 to 60 and reduced its operating hours to save costs. It also began closely some unprofitable locations. It had closed its operations in the Netherlands and was looking for franchisees to take over operations of facilities in France, Spain and Switzerland. Plans for an IPO were put off until 2005 or later. ("EasyCar put brakes on stock listing," 21 July 2003, *BBC News*). During the fall of 2003, easyCar received bad press because of complaints from customers about cars not being available as promised and not being able to find easyCar staff at certain locations ("How easyCar gives angry clients the runaround" *The Guardian*, 01 November 2003). By February, 2004, easyCar had operations in 39 locations, 30 of which were in the UK.

INSTRUCTORS' MANUAL REFERENCES

Garvin, D.A. (1984). What does Product Quality Really Mean?, *Sloan Management Review, 26*(1), 25-43.

Hill, T. (1999). *Manufacturing Strategy: Text & Cases*, (3rd Ed.) New York: McGraw-Hill/Irwin.

Levitt, T. (1972). Production Line Approach to Service. *Harvard Business Review*, September/October, 41-52.

Parasuraman, A., Zeithaml, V.A. & Berry, L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing, 49*(3), 41-50.

BEAUTY AND HONESTY AT AEROSPACE DESIGNS' MARKETING DEPARTMENT

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CASE DESCRIPTION

This case concerns a female employee, Lola Meyer, and the problems that occurred when Lola received a less than satisfactory assessment on her annual performance evaluation, one that was delivered over four months after it was due and not by her immediate boss. Lola's reaction to her negative performance evaluation was to claim sexual harassment against her boss and her coworkers (sexually-charged language and references to anatomical parts.) The case examines not only the issue of sexual harassment but also deals with the issues of time theft, fraud, and falsification of documents. The case has a difficulty level appropriate for sophomore level or above. The case is designed to be taught in one class period (may vary from fifty to eighty minutes depending upon instructional approach employed, see instructor's note) and is expected to require between two to fours hours of outside preparation by students (again, depending upon instructor's choice of class preparation method).

CASE SYNOPSIS

Derived from observation and field interviews, the case center's around Lola's seemingly misrepresentation of her working hours and days according to her time card. Lola was claiming overtime pay while her boss was out-of-town, stating that this work had been done for another Director. Further investigation by another Director (her boss was out-of-town) revealed that on several other occasions Lola had taken time off yet claimed those hours worked on her time card. When confronted with the discrepancies, Lola claimed that she had forgotten to put in those days as sick days. However, she also admitted as to not following the accepted procedure of calling in to the office when one is out sick. Ultimately, these facts were considered and the company decided to terminate Lola's employment due to falsification of her timecard on the two weeks in question. A month later, Lola sued the Company and her original supervisor for sexual harassment.

INSTRUCTORS' NOTES

Sexual harassment is a serious accusation, so is time theft. Yet when does one have proof of either accusation? This case concerns a female employee, Lola Meyer, and the problems that occurred when Lola received a less than satisfactory assessment on her annual performance evaluation, one that was delivered over four months after it was due and not by her immediate boss. Lola's reaction to her negative performance evaluation was to claim sexual harassment against her boss and her coworkers (sexually-charged language and references to anatomical parts) which resulted in a prompt investigation, a transfer of Lola to another supervisor, and sexual harassment training for her former boss.

This solution was acceptable to Lola.

The case problem center's around Lola's seemingly misrepresentation of her working hours and days according to her time card. Lola was claiming overtime pay while her boss was out-of-town, stating that this work had been done for another Director. Further investigation by another Director (her boss was out-of-town) revealed that on several occasions Lola had taken time off yet claimed those hours worked on her time card. When confronted with the discrepancies, Lola claimed that she had forgotten to put in those days as sick days. However, she also admitted as to not following the accepted procedure of calling in to the office when one is out sick. Ultimately, these facts were considered and the company decided to terminate Lola's employment due to falsification of her timecard on the two weeks in question. A month later, Lola was suing the Company and her original supervisor for sexual harassment.

INTENDED INSTRUCTIONAL AUDIENCE & PLACEMENT IN COURSE INSTRUCTION

This case was primarily developed for undergraduates taking a course in human resource management (HRM), although the case does include issues of business ethics (i.e. Is Lola's lawsuit blackmail and/or payment for her dismissal? What is the appropriate punishment for time theft?). The case specifically deals with sexual harassment and time theft and should be introduced after the students have read material on the legal environment of HRM (Kleiman, 2000, Chapter 2; Bowin and Harvey, 2001, Chapter 2) and complying with workplace justice laws (Kleiman, 2000, Chapter 11). The case was intended as an end of chapter case or end of section case (legal aspects of HRM), rather than serving as a comprehensive, end of course, case.

Learning Objectives

The overall purpose of this case is to have students examine two critical issues in HRM and how they are intertwined in this case. This case in particular has practical value to students since many of them may find that they as general employees, supervisors, or HRM specialists will have to deal with similar situations. Students are asked to probe beyond personalities and the immediacy of the moment and examine the underlying nuances of the posed problem.

Specific learning objectives are as follows:

1. For students to understand legal aspects of sexual harassment and time theft.
2. For students to analyze the behavior of management and the HRM department in dealing with Lola's two distinct situations.
3. For students to agree or disagree with management's decision to terminate Lola and explain why.
4. For students to determine what actions management and HRM could take in the future to avoid similar situations.

TEACHING STRATEGIES

Preparing the Student Prior to Case Analysis

There are several approaches, none of which are mutually exclusive, that an instructor may employ in terms of utilizing this case. It is strongly recommended that regardless of the specific methodology employed, that students prior to reading this case be exposed to some material on sexual harassment (Player, 1992) and time theft (Cheeseman, 2001). This will provide students with the proper perspective and allow them to acknowledge some of the legal issues embedded in the case.

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

a. a short lecture and/or discussion session on the above noted topics.
b. a reading assignment prior to reading the case that covers several of the topics mentioned.
c. a short student presentation on each topic.
d. a guest lecturer on one of the topics.

Traditional Case Method

In the traditional case method, the student assumes the role of a manager or consultant and therein takes a generalist approach to analyzing and solving the problems of an organization. This approach requires students to utilize all of their prior learning in other subject areas as well as the field of management. This case, in particular, will also require students to draw upon their knowledge of leadership, structure, culture and systems thinking. It is strongly suggested that students prepare for the case prior to class discussion, using the following recommendations: allow adequate time in preparing the case, read the case at least twice, focus on the key strategic issues, adopt the appropriate time frame, and/or draw on all your knowledge of business (Pearce and Robinson, 2000).

The instructor's role in case analysis is one of a facilitator. The instructor helps to keep the class focused on the key issues; creates a classroom environment that encourages classroom discussion and creativity, bridges "theory to practice" by referring back to key concepts learned in this or prior courses, and challenges students' analyses in order to stimulate further learning and discussion. There are several variations of the aforementioned approach including written assignments, oral presentations, team assignments, structured case competitions, and supplemental field work. Regardless of the variation employed, it is recommended that the students' work be evaluated and graded as partial fulfillment of the course's requirements.

Role-Playing

Role-playing "enacts" a case and allows the students to explore the human, social, and political dynamics of a case situation. There are several opportunities for role-playing in this case, the most interesting being the final meeting between Lola and Tom to discuss Lola's time discrepancies.

Prior to role-playing the case, students should be asked to read the case but and answer the following questions:

1. Who are the key participants in the case? Why?
2. What is the "role" of each of these participants in the organization?
3. What is the motivation, rationale, or benefit these participants derive from the situation?
4. What is the employee's rights and responsibilities?
5. What are management's rights and responsibilities?

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

Starting the Role-Playing Exercise

The role play should start at the beginning of the meeting, that is, Tom's presentation of the issue of the overtime that Lola had claimed and the summary of the ensuing investigation and his findings.

Lola hadn't been aware of the investigation going on that day and was unaware as to why Tom wanted to see her. In the discussion Lola claimed to have "forgotten" to put in for two days of sick time and offered to have the time changed. As that comment was to be expected, she had inadvertently indicated in the initial part of the discussion the procedure for communicating to her supervisor during his time away from the office. According to procedure, she was to either leave him a voicemail or an e-mail if she wasn't going to be in. She had not done so for the two days in question. For the prior week she had actually requested a personal day for that Thursday, and had taken it. When confronted with that timecard (which she would have completed the next day – Friday) her baffled response was simply that "she must have worked that day." In both cases she was aware that Mark was not in the office due to his travel schedule and that she had indeed signed both timecards (as was her habit when he was away).

Step 1: Assignment of Roles (5 minutes)

The class should be broken up into groups of 3-4 students. Assign the key roles of Tom and Lola to two members of each group. Class members not chosen for specific roles become outside observers. It might be helpful to provide the students playing Tom and Lola with specific instructions in terms of how to enact their roles. Varied instructions (a different set of instructions per group) may lead to differing results and add some value to the end-of-class discussion. For instance, one student playing Lola could be instructed to act indifferent throughout the whole meeting and agree to anything just to get out of the meeting. Another could act indignant, and threaten legal action. A student playing Tom could act in an accusatory fashion while another could act sympathetic. These variations should be noted for later class discussion.

Step 2: Enactment (20 minutes)

The student enacting the role of Tom should be instructed to start the role play with a summary of the situation (including problem definitions) and include comments concerning Lola's inaccurate time card. Both students, should then be instructed to contribute to the discussion with the notion of coming to some sort of resolution based upon their specific character instructions (i.e. a sympathetic Tom might look for an easy solution that would not hurt Lola while an accusatory Tom would fire Lola no matter what she said). The instructor during this phase of the exercise should note how well the students enacting Tom's role covers the major issues surrounding the case.

Step 3: Exercise Debriefing (20 minutes)

The meeting should first be debriefed as a whole in each group. Once the in-group debriefing is completed, the group should then address the class as a whole and then the discussion should be opened to the entire class. The instructor might want to ask the following questions or provide these questions to each group for guidance:

a. What were the goals and results of each meeting?
b. Did Tom accomplish his objectives?
c. What alternative results might have occurred from this meeting? Best and worst scenarios?
d. What theory(ies) from the course helped the students to understand the case situation and recommend solutions to the defined problems?

Students should also be given the opportunity to comment on the role-playing exercise as a learning instrument. The instructor might ask the class the following questions:

1. Did this exercise animate the case?

2. Did students get a "feel" for individual and organizational issues surrounding the case?
3. What were the strengths and weaknesses of the exercise?

4. What changes would they make to the exercise given their experiences with it?

Using Case Questions

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

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

1. What is the level of course instruction?

2. What type of case is being taught? (Iceberg, incident, illustrative, head, dialogue, application, data, issue, or prediction – see Lundberg et. al., 2001 for full descriptions.)

3. What is the instructor's preliminary assessment of the students' ability to be self-directed learners?

4. What are the students' previous experiences with case instruction?

5. If the students have already been exposed to the case method, what types of cases have they been exposed to, such as: Case incidents (1-2 page cases with questions); Short cases (3-8 page cases with and/or without case questions; Comprehensive cases (greater than 8-15 pages); or Harvard-style cases (greater than 15 pages)? (David, 2003)

6. What is the instructor's preferred method for case instruction? (For example, "sage on the stage", "guide on the side", "student as teacher" (student-lead discussions), "observer and final commentator" (open class discussion with faculty summation), etc….

SUGGESTED QUESTIONS AND ANSWERS

The following questions may be employed by the instructor either as guidelines for the instructor for case analysis and/or as questions to be distributed to the class in conjunction with the case. This methodology provides the instructor some latitude in terms of how much direction he or she wishes to provide the student and therein allows the instructor to modify the difficulty of the case to fit his or her class's needs. The questions are divided by topics.

1. Describe the legal aspects of sexual harassment, time theft, and fraud that impact upon this case.

Sexual Harassment. Sexual harassment is defined in Title VII of the Civil Rights Act of 1964 as "lewd remarks, touching, intimidation, posting pinups, and other verbal or physical conduct of a sexual nature that occur on the job." (Cheeseman, 2001, p. 843) These actions must create a hostile environment for the employee, one where "there were repetitive or debilitating incidents that would affect seriously the psychological welfare of a person of reasonable sensibilities." (Player, 1992, p. 207) A hostile environment is defined as any conduct including "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature" (29 CFR Section 1604.11(a)(3)) and must negatively impact his or her work performance or psychological well-being "as measured from the perspective of a reasonable person of the victim's gender." (Player, 1992, p. 210)

It is interesting to note that everyday conversations that may include obscenities, or a single incident or suggestion of sexual involvement in and of itself does not constitute sexual harassment. The plaintiff must indicate that the environment or the activity is unwelcome, although participation in an activity does not necessarily indicate approval. In an environment where sexual innuendos are the norm and the plaintiff fully engages in such behavior, the defendant would have the right to determine why the plaintiff did not object to such an environment before claiming sexual harassment. Another component of sexual harassment is that liability is based upon actions of the employer (i.e. owners, managers, supervisors – those with managerial authority over the employee), not necessarily the plaintiff's fellow employees. Management is not liable for the actions of low level employees it is not aware of, if the employer has a clear policy on sexual harassment, which includes a process of informing management of the harassment. (Player, 1992)

Time Theft and Fraud. Employee theft, one of the most serious problems faced by US businesses, takes many forms. The theft of tangible property is the most obvious and most controllable form. The theft of intangible assets, such as time, however, is more difficult to detect and reduce. Robert Half of Robert Half International defined time theft as deliberate waste of on-the-job time by employees who use company time for matters totally unrelated to the organization. (Scelsi, 1988) Unlike outright thievery of a company's supplies, a worker who steals time is less likely to feel guilty about it. (Schaeffer, 1988)

A 1990 study found that the typical employee steals 6 workweeks worth of time each year (Snyder, Blair, and Arndt, 1990) while 67% of surveyed professionals say that time theft - early departure, long lunches, excessive chatting with co-workers - is the leading way in which employees cheat the company. (USA Today, 1989) In an executive survey, 82 percent felt government employees steal more time than private sector workers, and 84 percent said workers under 30 steal more time than older workers. The most likely time for the thievery is during the first work hour on a Friday in December. (Thomas, 1986) Estimates are that, in 1987, firms lost up to $300 billion to employee crimes, and in 1988, they are likely to lose $200 billion to time theft. (Scelsi, 1988)

Fraud, also known as intentional misrepresentation, "occurs when one person consciously decides to induce another person to rely and act on a misrepresentation." (Cheeseman, 2001, p. 250) There are several types of fraud including fraud at the inception (where facts are hidden or there is deception relative to a contract), fraud at the inducement (where one party intends to break the terms of the contract), fraud by concealment (one party takes specific action to conceal facts from the other party), fraud by nondisclosure (is misrepresentation if it amounts to a failure to act in good faith), and fraud by misrepresentation of the law (only occurs when one of the parties is a professional or expert who should know the law and is intentionally misrepresenting it to the other party). (Cheeseman, 2001)

2. What are the facts in the case that apply to these legal considerations?

Sexual Harassment. In terms of case specifics, Lola claimed that her poor job performance, as stated in her evaluation, was due to sexual harassment. She mentioned several conversations which included inappropriate language from her boss Frank and a specific incident where she was asked by a group of co-workers to comment on a male's genitalia. Although she did not report these incidents until after her employee evaluation (she did not object at the times of these acts), her personnel office treated the incidents as sexual harassment and reached an agreement with Lola in terms of a remedy. The personnel office, however, also supported her boss's poor performance evaluation while her boss insisted that no wrong doing had occurred. The remedy, which was acceptable to Lola, was a lateral job move where she reported to another manager in the same Division and where her work location was moved away from her old manager.

Time Theft and Fraud. In the above case, Lola had claimed she worked overtime when her manager was out-of-town and no other manager would sign her time card. This set off a chain of events in that included the personnel department changing her time card to indicate that two days that she had claimed she had worked were in fact sick days (Lola was consulted on this), and an investigation by Tom, the HRM Director, which revealed that Lola did indeed take one day off the prior week as well. In addition, in each week her supervisor had been out of the office, and hadn't had the opportunity to even review and approve Lola's timecards, both of her cards were initialed in the supervisor's box by Lola herself and not by her supervisor.

Tom met with Lola who claimed to have forgotten to put in for two days of sick time and offered to have the time changed. As that comment was to be expected, she had inadvertently indicated in the initial part of the discussion the procedure for communicating to her supervisor during his time away from the office. According to procedure, she was to either leave him a voicemail or an e-mail if she wasn't going to be in. She had not done so for the two days in question. For the prior week she had actually requested a personal day for that Thursday, and had taken it. When confronted with that timecard (which she would have completed the next day – Friday) her baffled response was simply that "she must have worked that day." In both cases she was aware that Mark was not in the office due to his travel schedule and that she had indeed signed both timecards. Given the facts of the case the company decided to terminate her employment due to falsification of her timecard on the two weeks in question.

3. Analyze the behavior of management and the HRM department in dealing with Lola's two distinct situations (sexual harassment and time theft).

The average student will see this situation as much ado about nothing, that is, that both of these situations are quite straight forward from management's perspective. In the sexual harassment situation, the student will describe the incident as a clear case of sexual harassment and that personnel acted appropriately in both deciding that harassment did occur (inappropriate language was employed by a manager and coworkers and had negative ramifications since Lola's performance was substandard) and that the actions taken by personnel to resolve the issue was satisfactory since it was accepted by Lola. The time theft situation was also clear cut since Lola did not follow procedure in notifying the firm that she would be out for sick days and that she then clocked those days as work days on her time card. These students would agree that Lola was in the wrong although they may or may not believe that firing Lola was overly harsh given that this was her first offense. They may perceive Lola's law suit as sour grapes and not worry about any associated ramifications.

The above average student will recognize that both situations are not as clear cut as they seem. In the sexual harassment situation, Frank (Lola's supervisor) admitting no wrong doing and Sue, the HRM manager at the time, determined that Lola's performance was marginal and upheld the performance review as written. Since Sue determined that there was no impact on job performance (one of the requirements for a sexual harassment charge), this student might justify Frank's being "written up" for this situation and sent to sexual harassment awareness training as a way for the company to protect itself from potential lawsuits.

Exceptional students would note that these actions by personnel in fact lend credence to Lola's contention that there was a hostile environment that impacted her job performance since management took action to remedy the situation. Why "fix what isn't broken?" Secondly, these students would note that Lola was hired by HRM over Frank's objections

– this already set the stage for possible problems between these two individuals even before they were working together. Also, these students might also note that Frank's actions surrounding Lola's evaluation (late filing), coupled with his illness and inability to provide Lola direct feedback himself (her evaluation was given to her by another manager) may have exacerbated the situation. Certainly HRM should have noticed that Lola's performance evaluation was late. This should have been a signal to HRM to at least investigate why Frank was negligent in filing the form and may have uncovered some of the problems Lola had with Frank.

In terms of the time theft, the above average student would note that except for the breaking of the calling in policy for sick days and the claiming that those sick days were work days, much of the evidence against Lola was second-hand information and not well documented although Tom's investigation did reveal Lola did indeed take one day off the prior week and placed hours on her timecard as if she had worked that day. The fact that she signed her own time cards when her boss was away, in and of itself is not evidence of wrong doing and may in fact have been her boss's instructions. The exceptional student would note that it was to the best recollection of the General Manager and Sue of the Human Resources Department there had been no case in which Aerospace Designs had allowed this type of transgression but they made no reference to a company handbook or procedures manual that dealt with issues of time theft (or for that matter, sexual harassment). These students would also point out that Lola's immediate supervisor, Marc, had not been consulted in terms of this situation and may have been able to either support or reject the company's claim of time theft.

4. Agree or disagree with management's decision to terminate Lola and explain why.

Since this is an opinion question, there is no absolutely right or wrong answer. Although partially addressed in question four, in this question the student needs to provide both situational evidence and law to justify terminating Lola's position with the firm. Some students my see this situation as straight forward time theft and fraud, others might try to connect the previous sexual harassment situation, while others may opt for leniency for a first offense given the lack of a policy manual that deals with this issue or in order to avoid a potential lawsuit.

Secondly, students also need to address the impact of firing Lola on the firm as a whole – what message does firing Lola send to her fellow employees? Does it say that time theft and fraud will not be tolerated in any fashion or does it say that women, especially those who whistle blow concerning sexual harassment, will be given little opportunity to learn from their mistakes? Or does not firing Lola say that women who do whistle blow will be treated more leniently than others in fear of reprisal?

5. What actions should management and HRM take in the future to avoid similar situations?

Management, through the HRM department, needs to address several distinct issues:

a. The development and dissemination of a clear and distinct policy statement re: sexual harassment and a training program to ensure that supervisors and employees are quite clear on the consequences associated with sexual harassment. The company also needs to develop and publish clear and concise guidelines for the filing and handling of sexual harassment charges.

b. The development and dissemination of a clear and distinct policy statement re: time theft and fraud. There should be clear and concise definitions of each with associated consequences.

C. Student answers should address the need for HRM to take a proactive stance on each of these issues and provide their personnel with information and training when needed.

EPILOGUE

Lola left in a huff. Her parting jab was "you haven't heard the last from me," and "you better not mess up my unemployment." Her request for unemployment benefits was denied. Fred's other management issues resulted in his being released in July 2000. Lola found a Manhattan based lawyer willing to take her case on a contingency basis. The lawyer's threat to submit the case to the EEOC (unless AD could come up with a settlement) was initiated and the Company responded. The EEOC failed to see the merit of her claim of sexual harassment and retaliatory discharge. Lola followed with a civil suit that was settled about a year later quite modestly. Frank was individually named in the civil suit that was filed and it was determined he needed to retain separate counsel.

It was not completely clear as to why Lola falsified the time records. It was assumed that she was doing it for personal reasons. The fact that she was into modeling spurred guesses that she was going to the hairdresser, makeup artist, photographer, and other image consultants to help her "other career".

The AD supervisory staff since was trained in harassment awareness and the company handbook was rewritten to more clearly articulate the company policies and expectations. The marketing assistant job vacated by Lola was never filled. The latest was Lola's modeling career was expanding into maternity clothing.

REFERENCES

Bowin, R. B. & D. Harvey (2001). *Human Resource Management: An Experiential Approach*. 2nd Edition. Upper Saddle River, NJ: Prentice-Hall, Inc.

Cheeseman, H. R. (2001). *Business Law: Ethical, International, & E-Commerce Environment*. 4th Edition. Upper Saddle River, NJ: Prentice-Hall, Inc.

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

Kleiman, L. S. (2000) *Human Resource Management: A Managerial Tool for Competitive Advantage*. 2nd Edition. Cincinnati, OH.: South-Western College Publishing.

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

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

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

Pearce II, J. A. & R. B. Robinson Jr. (2000). *Strategic Management: Formulation, Implementation, and Control*. 7th Edition. Boston, Mass.: Irwin McGraw-Hill.

Player, M. A. (1992). *Federal Law of Employment Discrimination*. St. Paul, Minn.: West Publishing Company.

Schaefer, T. (1988). Time wasting' by employees estimated to cost billions, *Houston Chronicle,* Sept. 18, 2.

Scelsi, P. (1988). Time Is Money-Lots Of It. *Management World*, (Nov/Dec) 17, 6, 19-20.

Snyder, N. H., K. E. Blair & T. Arndt. (1990), Breaking the Bad Habits Behind Time Theft. *Business,* (Oct-Dec) 40, 4, 31-34.

Thomas, L. R. (1986). Time theft/Survey finds workers `steal' working hours. *Houston,* Dec 14, 2.

USA Today (1989). On-the-job cheating. *USA Today,* Oct 13, 01B.

THE SHORT BUT HAPPY LIFE OF DYERSBURG FABRICS

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CASE DESCRIPTION

In this case the authors tell the story of the early years of Dyersburg Cotton Products, later Dyersburg Fabrics, in a way that highlights the difficulties the company had of surviving in an industry beset with so many labor and import problems. Woven around the account of Dyersburg Fabrics, is a brief account of the history of the U.S. textile industry from its inception in 1790 to its current status of near extinction. This case would be most suitable for upper division undergraduate courses or graduate courses in Human Resource Management or Organizational Theory or Behavior. The case is designed to be taught in one fifty to seventy-five minute class period, with about thirty to forty-five minutes of reading and preparation time on the students part, prior to class.

CASE SYNOPSIS

The history of the American Corporation begins with the textile industry in New England in 1790. Slater imported the British textile technology, processes and expertise to Massachusetts and a hundred years later, it had spread all over the northeastern U.S. Due to clashes between management and labor, the industry began moving south in search of rural communities in need of relatively good paying work, where patriarchal mill towns could be set up, including tenement housing owned by the company, and where entire families could be counted on to work hard and remain loyal to the company. On March 25, 1929, just a few months before the stock market crash, Dyersburg, Tennessee became the site of a cotton, spinning, carding and weaving operation transplanted from operations in Oswego, NY and Adrian, MI.

The company would barely survive the early years due to the global depression. The story told in this case is one of resilience and the tireless pursuit by management of healthy employee and community relations. The war years proved beneficial to the company, but the post war years saw the struggle become one of competition with foreign imports. Only through continuous modernization did the company continue throughout the century. Dyersburg competed more effectively than unionized textile mills, by paying decent wages and keeping employees involved in the social life provided by various company programs.

This case would serve well as a companion to the early chapters in a Human Resource Management text, giving a little of the flavor of how HR was practiced during the early part of the 1900s, or as a case to support a chapter on organizational culture in an Organizational Behavior class, dealing as it does with how organizational culture became an important phenomenon for management to understand and seek to influence, even prior to the time when organizational culture was a popular term.

INSTRUCTORS' NOTES

Recommendations for Teaching Approaches

This case is best used in either a human resource management or an organizational behavior class. It features a historical perspective on employee relations in the oldest industry type in America, the textile industry. Ideally the case will be used near the beginning of the semester when the discussion pertains to the history of human or employee relations in organizations. If such a history is not included in the text you are using, this case may serve as a catalyst for a deeper investigation into this important part of business history. Students should not be heavily guided for what to see in the case, but rather, allowed to glean from it what they believe is important. Then in the post-case debriefing time, it would be appropriate to make connections to literature and history that are from the same period or ways in which employee relations have evolved since that time period.

DISCUSSION QUESTIONS

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1. **Why do the case authors compare the company's life to that of an individual?**

   The feelings of those involved have indeed been similar to feelings people tend to have toward loved ones lost to death. The use of the Biblical reference also creates something of a spiritual tone, demonstrating the extent to which the author expects the reader to consider the emotionality of the situation.

2. **What must have been the nature of the ambivalence the people of Dyersburg felt when just months after their first large industrial plant opened, they and the nation were wracked by a depression?**

   This discussion will, of course, move in the direction the students see fit, however, a few things to point out would be that the people who were the laborers may not have felt quite as much shock as those who were the owners of the company, although this could be debated. In general, those who have never had much money tend to have their lives less altered when it economic catastrophe hits their region or nation. This said, the strain placed on those who have already been struggling economically may well mean that their hopes for relatively steady improvement in their lives will have been dashed or put on long-term hold.

3. **What do the case authors mean when they say the American textile industry has gone through immigration, migration and emigration?**

The textile industry was imported from England to New England in the late 1700s, moved south in the mid to late 1800s and exited the U.S. during the last few decades of the 1900s.

4. **Analyze the different perspectives of those involved in the move from Michigan and New York to Dyersburg, including those who lost their jobs, those who made the decision and the people of Dyersburg who were on the receiving end.**

Those who lost their jobs were likely already angry with the company and might have at least not expressed a lot of anger at the company leaving, adopting something closer to the attitude of "good riddance". There is the interesting parallel between the way they felt in the 1800s and the way the people in Dyersburg felt some 100 years later, when the business closed on them. It should be pointed out that this story is a familiar one in business, since the history of many industries is they come in search of favorable conditions for themselves (including cheap labor), often have low regard for the conditions of the work, and then ultimately move on to a new place in search of once again, more favorable conditions for themselves. Those who were making the decision saw it as a matter of staying profitable and getting away from the nuisance of unions. This means unions both helped the folks in NE and hurt them, since their effectiveness led to the jobs moving south. The folks in Dyersburg were unaccustomed to these sorts of jobs, must have been quite excited to get the work, probably experienced some culture shock when the Italians, Germans and British folks moved to town, and may well have had a roller-coaster of emotions seeing the new business start up and then immediately suffer economically.

5. **Was the company attitude toward the people of Dyersburg one of pure beneficence, or was it more nuanced than that?**

Certainly, the situation the company offered the workers was for most of them better than many of the alternatives presented in their community. However, there is no avoiding the fact that the treatment of the workers and their pay rates, must surely have been below the standards of those fighting for the jobs back in NE, since the company was aggressively in cost-savings mode.

6. What was the significance of the Spinnit to the development of the company culture?

The paper provided a creative outlet for some of the employees, sort of an serendipitous extension of their education which in many cases may have been truncated by their having taken mill work. Whether all the employees embraced the newspaper the same way, we are not told, but it appears that its popularity must have been substantial for it to last for so many decades. The stories, fictional and current-events oriented, provided a type of text that the employees could all read, thus giving them the requisite shared experience for deeper cultural values.

7. What evidence do we get that the community and Dyersburg Cotton Products had a good relationship?

The company paid for the ballpark, the employees folded bandages, bought bonds, the mayor helped dedicate the ballpark, the people flocked to the baseball stadium on Sundays, the company made a great effort to recognize and include employees and the lines between the company and the community appeared to be blurred.

THE THRILL OF VICTORY, THE AGONY OF TITLE IX: THE CHALLENGE OF COMPLIANCE

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CASE DESCRIPTION

The purpose of this case is to present the dilemma many universities face as they attempt to ensure gender equity within their athletic programs. The case allows students the opportunity to examine the operating budget for a Division I-AA institution and make recommendations regarding how to best fund additional sport programs to achieve Title IX compliance. The 2001-2002 Operating Budget for an athletic department as well as NCAA Division I-AA institutional data are provided. Selected demographic data for the university is also available. The case has a difficulty level appropriate for senior or first year graduate sports management or related courses. The case is designed to be taught in two class hours and is expected to require three hours of outside preparation by students.

CASE SYNOPSIS

The university's athletic program is not in compliance with Title IX. The critical decision to be made by the athletic director is how to best allocate funding to support sports programming that meet the needs and interests of the university, the students, and surrounding community. No incremental funding support is available from the university. In the past, such decisions were based on the emotional case for maintaining football and other men's sports. Funding and full compliance with Title IX can be accomplished, basing all decisions on the financial strength of individual sports.

INSTRUCTORS' NOTES

Case Overview

Athletic Director Gary Vega was prepared for a low impact summer until the senior women's administrator entered his office to inform him that the new University President was concerned with the athletic program's level of compliance with Title IX. He was familiar with the struggles of other Division I-AA athletic directors were facing in meeting compliance. Knowing there would be no incremental funding from the university, he would have to achieve compliance with minimal impact on the other sports.

SUGGESTED TEACHING APPROACH

This case is best used to illustrate the dilemma faced by director of athletics concerning compliance with Title IX while simultaneously dealing with tightening state budget and a persistent budget deficit in the school's recent past.

The primary objective for the reader is to determine the current level of Title IX compliance in terms of 1) participation, 2) scholarships, and 3) other benefits.

SUGGESTED QUESTIONS

1. Identify the three major categories analyzed for Title IX compliance.

A. Accommodation of interests and abilities (sport offerings)
- 1). Provide men and women participation opportunities proportionately to the enrollment rates of full-time undergraduate students:
  - a.. The percentage of student athletes by sex should mirror the undergraduate enrollment of fulltime students. A California court case established a 5% variance as acceptable under that state's law. The Office of Civil Rights (OCR) has no established range for compliance.
  - b. When a school has football, which has far more athletes than other sports, women will most likely have more teams than men to be compliant.
- 2). Demonstrate a history of continuing to expand opportunities for the underrepresented sex:
  - a. The OCR will consider the institution's past efforts for adding sports for the underrepresented sex; policies for addressing student interests in adding sports; and a strategic plan which allows the institution to monitor its level of compliance and policies for addressing inequities.
- 3). Fully accommodate the interests and abilities of the underrepresented sex:

a. Compliance may be achieved if the institution identifies and acts upon the interests of the underrepresented sex provided those interests (sports) are offered withi9n the school's normal competitive region.

B. Athletic financial assistance (scholarships)

1). Total scholarships are to be divided in proportional to the participation of men and women in the athletics program:

a. Total funds available should be allocated based upon participation rates, i.e. if 40% of the student athletes are women, then 40% of the scholarship dollars should be allocated to women.

C. Other program areas (everything else)

1). Equipment and supplies
2) Scheduling of games and practice time
3). Travel and per diem allowances
4). Tutoring
5). Coaching
   a. Total dollars spent on coaches should be proportional to participation.
6). Locker rooms, practice and competitive facilities
7). Medical and training facilities and services
8). Housing and dining facilities and services
9). Publicity
10. Support services
11). Recruitment of student athletes
   a. Total dollars spent on recruitment should be proportional to participation.

2. Assess the level of Title IX compliance with respect to each of the three major categories analyzed for compliance:

a. Accommodation of interests and abilities (sport offerings).
b. Athletic financial assistance (scholarships).
c. Other program areas (everything else).

a. Accommodation of interests and abilities (sport offerings)

1). The athletic department is not compliant since 58% of the students are women and only 33.8% of the student athletes are compliant.

2). Again, the department is not in compliance since it has been five years since a women's team had been added and no plan was in place to reassess compliance.

3). Since Soccer is offered within the Conference, Soccer may be an appropriate addition to the program.

b. Athletic financial assistance (scholarships)

1). The department may be in compliance, since women have approximately 35% of the scholarship funds ($381,794) which is close to their participation rate of 33.8% , provided the funds were equally distributed among men and women who participated in Track & Field and Golf.

c. Other program areas (everything else)

1). Coaching: excluding the co-ed sports, total dollars spent on coaches is proportional to participation (women coaches are paid $202,080 for 30% of the salaries and their participation rate was 28%).

2). Expenditures on the women's sports may not be compliant since the amount spent on matching sports is greater for men than women.

a. Men's Basketball = $95K vs Women's Basketball = $65K

b. Baseball = $50.9K vs Softball = $26K

3. To what extent will the department be in compliance if it adds Soccer for women?

a. The department will meet one test for compliance by adding a new sport for women. Based upon the actions from five years earlier, the school may be able to suggest an ongoing effort to improve opportunities for the underrepresented sex. However, the participation rate will still lag behind at 38.5% vs the 58% level for undergraduate women.

b. Scholarships shift to favor women from 35% to 40.2% while the new participation rate for women would be 38.5%.

c. Coaches' salaries (excluding the non-gender sports) will remain compliant at 35.8% for women while the participation rate would be 35.3%.

d. Miscellaneous note: the revenue a sport produces for the department is not a factor in determining compliance.

e. Additional actions may include:

1). Balance the operational expenses for men's basketball and baseball with the expenses for women's basketball and softball.

2). In addition, funding for Soccer may come from men's basketball and baseball.

3). Establish a review process and strategic plan to monitor compliance ongoing to address future inequities. Included with the plan is surveying the student body to identify sport interests of women.

4). Encourage the conference to pursue other women's sports.

The case is not especially technically difficult, although it does challenge the reader to solve the necessity of expansion to accomplish compliance with this part of the Education Amendments Act of 1972. It is set in an increasingly problematic budget condition, and will usually invoke an emotionally charged discussion in class; and an excellent learning opportunity.

TAHITIAN BLACK PEARLS: A FAMILY BUSINESS STRATEGY CASE

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CASE DESCRIPTION

The primary subject matter of this case concerns the decision of a small, Pacific Island entrepreneur on how to enter the black pearl market. The issues examined are largely strategic and include Porter's five forces model, value chain analysis, distribution channels, and SWOT analysis. Secondary issues include analysis of the cultural and regulatory environment in which business operates. The case is appropriate for levels three and four. It is designed to be taught in either 1 class hour or 1.5 class hours. Student preparation should take between 2 and 3 hours

CASE SYNOPSIS

Imagine yourself on a beautiful, isolated atoll in French Polynesia. The crystal blue water laps at your toes while you drink milk fresh from the coconut. Children laugh with joy as they play in the warm, tropical waters. Sound nice? Now, imagine that you live on this small island, population 600 and need to make a living.

This case is set in the black pearl industry of French Polynesia. It presents the entrepreneurial choices made by a small pearl producer on the island of Takaroa. Here is the situation. Manea Tuahu has not produced a saleable crop of pearls for two years. Prior to that time, the Tuahu family had cultivated black pearls with revenues of roughly $200,000. Unfortunately, the division of the proceeds among the various family members had created hard feelings. This disruption of family harmony combined with a disease that entered the lagoon convinced Manea to stop pearl farming and tend to his small general store. Two years later, he is again considering pearl cultivation to enhance his $6,000 annual income.

As he considers changes in the industry and his own strengths and weaknesses in pearl farming, Manea faces a difficult decision. Should he start producing again? Should he shift to being an industry supplier? Should he use family labor or more skilled, hired labor? How will he sell his pearls in an increasingly competitive market? These and other questions cloud his mind as he goes fishing with his friend, Tehina.

Careful discussion of this case will provide students with insights into the analytical tools entrepreneurs use in their strategic decision making. If used in the winter, it will also make your students think about quitting school for adventure in warmer climes.

INSTRUCTORS' NOTES

The Immediate Issue

Manea Tuahu must decide whether he will begin to produce black pearls in the family's traditional waters after a two year break.

Possible Student Assignments

1. **What are the key issues Manea Tuahu faces? (lease lagoon, produce with a hired grafter or with Tiare, distribution channel, do nothing). What does a financial analysis of the case tell you about the alternatives available to Manea Tuahu?**

Manea faces several key issues. The most obvious of these is whether he should begin to produce pearls again, lease his lagoon rights, or simply do nothing with regards to the black pearl industry. If the student indicates that Manea should again begin production, at least two follow-up issues come into play. These include the issue of whether to use Tiare as the grafter or to hire a professional and, which distribution channel will be most effective.

With regards to the first decision, the data indicate that Manea currently derives an income of approximately $3,000 per year from his store. This income is most likely supplemented by approximately $3,000 from family members living abroad based on average figures for the islands. This yields an overall income of roughly $6,000 per year. When combined with subsistence fishing and farming activities, and the support of the French government, Manea and his family will have no problem surviving and will have a great amount of free time to enjoy their island life.

Data for the leasing of the lagoon are not available in the case. There is some suggestion that the lagoon rights might be leased for somewhere around 5% of the value of the pearls produced. By crunching the numbers in the case, the students should calculate that Manea's waters could produce some 30,000 grams of pearls which at 1999 prices would yield a value of roughly $560,000 every two years. At five percent, this would yield rental revenue of approximately $28,000. Of course, if prices continue to fall, this number could be smaller.

Additionally, the issue of whether his lagoon rights will be leased at all must be considered. This is complicated by the fact that currently no large producers are leasing

Takaroan waters and that there may even be some local hostility to the idea given that the large producers have been seen as taking the lion's share of profits in the industry. Overall, Manea guesses that the chance of being able to lease his lagoon rights to a larger producer are relatively small, probably somewhere between 0% and 30%. Taking a midpoint would result in a 15% chance that he will earn $28,000 in leasing fees every eighteen months or $18, 667 per year. The financial calculations, result in an estimated income of approximately $2,800 per year. ($18,667 x 0.15). Of course, this is an all or nothing proposition with an income of almost $19,000 per year or nothing at all.

Now, if the students indicate that Manea Tuahu should begin cultivating pearls, one issue that he must face is whether to use his daughter Tiare as a grafter or to hire a professional. There are two primary ways in which to analyze this question – quantitatively and non-quantitatively.

From a financial standpoint, the case indicates that less skilled graffeurs are successful in creating a saleable pearl some 50% of the time while that number is between 80% and 90% for those who are the most skilled. For a cultivator like Manea, this means that if he could produce 30,000 grams of saleable pearls using his daughter Tiare, he could probably achieve a yield of about 51,000 grams using a more skilled graffeur.

85%-50% = 1.7

30,000 x 1.7 = 51,000 grams of saleable pearls

If we multiply the difference in the production, 21,000 grams by the most recent per gram sales price($18.6 per gram) we obtain increased revenues of $390, 600.

A more sophisticated analysis, however, would should that the sales price Manea achieved in 1998 was only about $10 per gram while the market was averaging $22.21 per gram. This is probably partially due to the fact that the pearls that Manea's oysters produced during that period were of lesser quality on average than those produced by the average cultivator. This difference may also be explained, however, by other value chain factors such as market access and distribution channels used. While hiring a professional graffeur might largely handle quality differences, it would not address these other factors.

As a result, analysis might include a high and a low estimate of the value of hiring a professional graffeur. The high estimate is probably the one calculated above, $390,600. This assumes that all differences pricing differences are due to quality and, therefore, eliminated by hiring a professional graffeur. While this is probably not realistic, it does create an upper level boundary that is helpful.

The low estimate would assume that the grafter did not change the distribution of pearls in each range but merely brought a larger number of pearls into the acceptable range. While this is probably not realistic, it does create a lower limit. The calculation here is created by multiplying the increased number of grams by the projected price divided by 2.2

(the ratio of Manea's 1998 per gram price to that of the market average). This would equal $177,545.

In determining whether it makes financial sense to hire a profession graffeur, we would want to know the interest rate Manea would face if he were to borrow funds to over a two year period of time to finance the initial cost of grafting services as well as the cost of the grafting services themselves. Unfortunately the case provides neither number, nor any comment on the ability of Manea to obtain a loan.

Further, we have only looked at revenue changes. While much of the cost of producing pearls would not vary as one must take care of all the oysters seeded regardless of expected future pearl quality, some marketing and sales costs would certainly change The one piece of information in this case that sheds additional light on the cost question is the fee charged by the G.I.E.'s to small producers like Manea. This amount is equal to 8% of the sales price. If we reduce the high and low estimates by this amount they then become roughly $360,000 and $163,000.

Another factor given in the case that students might mention is the opportunity cost of Tiare Roberts who would need to spend 4 months doing the grafts.

In addition to the financial costs which can be somewhat accurately calculated, there are non-financial data that would also come into play in this decision.

First, Manea seems very concerned about family relations. In Pacific island cultures, family is everything. As a result, Manea must consider what will happen if he were to not use his daughter to do the grafting. Would Tiare be offended? Would she be happy to not have to spend 4 months doing the grafting work?

Additionally, the market seems to be reaching saturation to some extent. Pearl production keeps increasing, but the price per gram is decreasing. Does Manea want to produce such a large number of pearls? Will he be able to sell all of his pearls if the acceptable number increases by some 250%? The current marketing environment is difficult and he has lost his primary distribution channel. While selling some 51,000 grams of black pearls is certainly not a foregone conclusion, he could just use a professional grafter to seed a smaller number.

The final key issue that the students should raise is the question of which distribution channel will be most effective. As a SWOT analysis or a Porter's Five Forces analysis will show, Manea and other small producers like him are at a disadvantage compared to the large producers. They simply produce an insufficient number of high quality pearls to justify holding their own trade shows in foreign markets. As a result, these producers, at best are hoping to either pick up the second tier of retailers including those in the local market or to work through a wholesaler such as Inka. Another alternative might be to team up and hold auctions or shows in foreign markets. In this case, the big producers would have to pay to join them in the foreign location.

In the past, Manea has been successful in reaching second tier retailers in Japan who buy in small lots but pay relatively high prices for pearls. Of course, this option no longer seems probable now that his daughter is divorced from her Japanese husband. The students may suggest, however, that Manea try a similar approach in the Hawaii market where he also has family. While the demand may not be as great as in Japan, there is a good market for black pearls in Hawaii that can easily be targeted by Tiare.

What most students will probably recognize is that Manea will probably benefit from using multiple distribution channels. While he may want to initially approach the U.S. market where he can hope to sell directly to retailers, he clearly should not ignore the GIE auctions as they are a relatively inexpensive way to make sales, albeit at somewhat lower prices. Further, wholesalers such as Inka can also provide a very low cost distribution channel, but one that pays lower prices.

In the end, while there is clearly not enough information provided to make a final decision regarding distribution channels, there is sufficient information to generate an interesting discussion.

2. **Putting yourself into Manea Tuahu's shoes (or slippers), would you begin producing pearls again? Show the analysis you have done which supports your decision.**

This question should really only be used if you are not concerned with the students identifying the key issues on their own. The answer to this question is outlined in the previous section.

3. **If Manea Tuahu does begin producing pearls again, how should he sell his pearls in order to maximize profit?**

This question should really only be used if you are not concerned with the students identifying the key issues on their own. The answer to this question is outlined previously.

4. **Perform a SWOT analysis for Manea Tuahu's family business. Based on your analysis, what should he do to assure the success of his pearl farming business.**

<u>Strengths</u>

Lagoon rights
Daughter with grafting skills
Owns the needed equipment
Pearl producing knowledge
Spare time

Free family labor
Low initial investment requirements (owns equipment, has access to labor that does not require immediate payment, and understand the process)

Weaknesses
Small size
Lack of access to capital
Poor to average pearl quality
No direct access to biggest markets
Limited marketing abilities
Low level of formal education to deal with import/export documentation
Hard feelings among family members that may make it hard to work together

Opportunities
Develop Hawaiian pearl market
Leasing lagoon rights
Entering the value chain at another level such as spat production

Threats
Maturing market
Increased competition from large French Polynesian producers at the GIE auctions
Competition from other geographical locations such as the Cook Islands and Hawaii
Disease
Additional government regulations such as the quality requirements recently put into place

5. **Perform a Porter's Five Forces analysis of the black pearl industry from the perspective of a small producer like Manea Tuahu. Based on your analysis, is this industry likely to be profitable for Manea Tuahu? What areas of concern does this analysis raise for his family business? What opportunities does this analysis suggest for a small black pearl producer?**

Competitors: An analysis of this force indicates that Manea faces competition from a number of small producers such as himself. He also faces even stiffer competition from the large pearl producers who enjoy significant cost and market access advantages associated with their large size.

Further, a look at the industry numbers will indicate that production has been increasing from year to year while the per gram price of black pearls seems to be decreasing

over recent years. This trend is characteristic of markets that are mature or maturing. In such markets, the competition becomes heated as an increasing number of companies fight over a relatively fixed number of customers. This provides a good opportunity to discuss how one competes in different stages of the industry life cycle.
This force should be considered **strong in this industry.**

Substitutes: Students may list a large number of substitutes for black pearls. Most likely, these will be other types of jewelry or precious stones. The most obvious substitute is white pearls. Other competition comes from precious stones such as diamonds, rubies, emeralds and so forth. Jewelry made of lower cost materials such as hematite and jade could also be considered a weaker substitute..

The key here is to let the students use their imaginations but to encourage their thinking about the directness of the competition between the named substitute and the black pearls. Almost any item of jewelry from a pair of beautiful diamond earrings to an inexpensive necklace made of beads may be considered competition. The diamond earrings are more likely, however, to compete directly with black pearl jewelry as they probably target the same type of customer

This force should probably be considered quite strong as the pricing of the substitutes is, in many cases, competitive and the function that they serve is similar.

Threat of New Entrants: In this case, the threat of new entrants is somewhat limited by a single factor – lagoon rights. While there exist many South Seas lagoons, only certain of them seem to have the conditions allowing for pearl production to be successful. The rights to these lagoons are held by families, many of whom already engage in pearl production or lease their rights to other pearl producers. While there certainly is room for expansion, this becomes a political question that is not as simple as obtaining a business license.

As a result, while the costs of entering the industry are not terribly high at a small level of production, the political ability to do so is somewhat more problematic.

The greatest threat of new entrants probably comes from other Pacific Island nations such as the Cook Islands or Hawaii. Each of these is briefly mentioned in the case as having started pearl production. While the case does not make clear how competitive these other production sights will be (nor is it clear in the industry itself), students should mention this as a probable source of competition. Of course, if the market is reaching saturation, new entrants will be increasingly unlikely barring a significant technological or cost breakthrough.

This force is probably a weak to moderate force in the industry with low entry barriers pushing it to the moderate side.

Suppliers: The suppliers to this industry are limited. There are, of course, suppliers of things like ropes, buoys, and small boats. These suppliers tend to have little power over producers as there are a large number of them and none of their technology is proprietary. As a result, their ability to increase prices or control the small pearl producers is insignificant.

Other suppliers to the industry include those who provide spat to the pearl producers. The case does not provide a great deal of information about these producers. It is possible, however, for a small pearl producer such as Manea to collect his own spat. It increases his time to market but may also reduce his cost. As a result, there is a realistic threat of backward integration.

Finally, the other supplier to this industry is labor. The non-specialized work involved in cleaning oyster shells and harvesting the oysters would carry no significant power. As is made clear in the case, however, graffeurs are highly skilled workers whose input can add significant value to the process. To the extent that these individuals are rare, they can command very high wages. The case does indicate that they highly paid Japanese graffeurs are facing new competition from Chinese and local graffeurs with increasing abilities.

Overall, suppliers would seem to be a weak force in the industry.

Customers: While the case provides no specific information regarding the number and size of the customers, students should be able to understand that there exists both larger wholesaler and retail chains capable of buying thousands of grams of pearls. These customers demand high quality and competitive prices. The small pearl producers, however, are unlikely to be selling to such customers except in an aggregated way through the GIE auctions. Rather, their customers tend to be either smaller wholesalers who live in French Polynesia, local retailers, or small overseas retailers. These customers probably buy pearls in lots ranging from 100 grams to a few thousand grams. They are keenly aware of market prices and may demand price concessions if they know that this year has produced a bumper crop. Overall, however, their only real power comes from the fact that there are so many small producers trying to sell in the market.

The customer force is, therefore, probably only a moderate force in the industry.In the final analysis, this is likely to be a moderately difficult industry for a small producer like Manea in which to make profits. As Porter indicates, the most important of these factors is the direct competition and this is exactly where ManeaTuahu faces his biggest challenges. As the industry continues to mature, this competition will only become stronger.

On the other hand, Manea Tuahu and other small producers like him face a fairly low cost structure. Much of their labor comes from friends and relatives who do not face high economic opportunity costs for their time. Their lagoon rights are zero cost to them. Many of them already own the boats and buoys needed to maintain the pearls. Their largest cost will certainly come in the form of grafting services.

As a result, students may argue that Manea and other small pearl producers are likely to make good profits in this industry for many years to come. Those profits may not be as great as they were in the past, but for someone who is living on less than $10,000 per year the profits don't need to be huge to make a real difference.

The possible areas of concern that this analysis creates for Manea might include the entrance of new, foreign competitors and the way that the larger customers are being stolen prior to the GIE actions. Unfortunately, there may not be much that Manea can do about either of these. It may, however, be possible for him to encourage the GIEs to adopt different selling strategies such as working more one on one with large customers rather than through an auction forma or holding auctions abroad.

Finally, new possibilities arising from the analysis that Manea may want to consider include the possibility of becoming a supplier to the industry. He has the ability to collect spat and sell it to local producers. Further, leasing his lagoon rights to a larger producer may also be suggested by the high degree of rivalry in this industry. The competition in this area may be less extreme than that faced further downstream.

No other real possibilities seem to be suggested by the case. Students may, however, get creative and speak of training foreign producers who would like to enter the market, going after smaller jewelry markets found in other places beyond Japan, Europe, and the United States, producing oysters to sell to local hotels, and so forth. Each additional idea should, of course, be examined for evidence from the case that might support its success as well as the logical strength of the argument given the knowledge of market conditions available to students in the class.

6. Conduct a value chain analysis for the black pearl industry. What strategies does your analysis suggest for Manea Tuahu?

In conducting a value chain analysis, students should examine both Manea's value chain and its relationship to the value chains of other participants in the industry. By doing so, the students may identify opportunities form him to increase his profits through additional revenue generation, cost reduction, or some combination of the two.

The case does a fairly complete job of laying out the value chain for the industry. First, spat and other materials are delivered to the pearl producer either by boat or plane. These spat are then allowed to mature by the producer who takes care to clean them and to keep them at the right water temperature so as to assure maximum growth. When the oysters reach an appropriate size, they are seeded with a nucleus. This step is either outsourced to professionals or completed by producers (or a family member as in the case of Manea Tuahu) with that particular skill. The oysters are then returned to the water for a period of 18 months to two years. During this time, they are cleaned and kept at the appropriate depth by the producer. At the end of that period the oysters are opened, pearls removed and the oysters receive a new nucleus.

This is the extent of activities undertaken by most small pearl producers. In the past, Manea took an additional step in house by transporting and selling the pearls through his daughter in Japan. Most small producers, however, place their pearls in a GIE auction, sell them to wholesalers, or try to traffic them door to door. The pearls are then either sold loose or turned into earrings, necklaces, rings, pendants, and so forth by jewelers. This step is not likely to be undertaken by small pearl producers.

Support activities undertaken by small producers are minimal as such things as technology development, human resource management, and the firms infrastructure are usually not undertaken at more than a rudimentary level due to the size of the firm. Further, procurement of supplies is typically done just a few times a year through well known intermediaries at competitive prices.

Students may suggest a number of possibilities suggested by a value chain analysis of Manea's operation. Among the more probable of these are backward integration into spat production, outsourcing grafting or enhancing grafting skills, or even specializing in the care of seeded oysters as part of the value chain of a larger producer.

Each idea should be explored in the depth appropriate to the skill of the class members. As outsourcing of grafting has been addressed in some detail previously, it will not be further considered here. Increasing Tiare's skills in this area may not be straightforward as it is largely a function of experience and aptitude. Short of Tiare returning to French Polynesia to hone her skills, further development would prove difficult.

Beyond grafting, the case probably does not provide enough information to yield a thorough analysis of the backward integration alternative into spat production. It does indicate, however, that the number of pearls produced in French Polynesia continues to grow while prices are declining. This suggests that spat production may be a growth segment in this value chain wherein profits are growing and small producers will not face heavy competition from large, established producers. While complete movement into this segment of the chain alone may not be necessary, a backward move might provide additional revenue while also reducing production costs down the line.

The final possibility, refocusing on core competencies centered around lagoon rights and the ability to take care of pearl oysters as part of a larger producer's value chain may have some possibilities. Large producers would like to become even larger in order to take advantage of economies of scale. Without knowing minimum efficient scale and the current size of producers, however, it is hard to predict how attractive such an option may be to the larger producers.

On the other hand, the case does indicate that sometimes, these producers face opposition in leasing local waters to increase the size of their operations. If this alternative would allow them, somehow, to sidestep such opposition, they may be willing to pay more for this option than they would in lease fees. For Manea this would mean moving from a higher value added activity to a lower value added activity. Again, however, it has the advantage of moving him away from direct competition with large producers to a more cooperative relationship. Of course given the cultural norms in the area, where earning a small amount of additional money may not compensate for a major decrease in leisure time, this option may not be attractive.

Without more specific information on the amount of time required and the compensation available, this probably just remains an idea for Manea to explore with one or more large producer. It would, however, move him towards a core competency or major strength and reduce his activities in areas wherein he is weak.

These are just a few suggestions. Students, of course, will add their own which should make for an interesting discussion about the possibilities open to Manea in the black pearl value chain.

7. How is Manea Tuahu's decision making affected by the cultural environment in which he operates? How is this similar and different to the cultural in the country where you are studying or in the country where you were born?

This question is probably answered best in three parts.

i. First, the importance placed on family is significant in Pacific Island cultures. Making money will be secondary to Manea when compared with the importance of keeping his family together. While the students cannot be expected to know much about such cultures, the case provides sufficient evidence that the unity of the family will factor into Manea's decisions. From a practical standpoint, they will impact his choice of graffeur and his distribution of any profits. If it is at all perceived that outsourcing the grafting will hurt his daughter Tiare's feelings, he will probably not choose to outsource. Similarly, if he perceives that starting the business again will cause hard feelings in the family, he may choose a less profitable option such as leasing lagoon rights.

ii. The second cultural issue is closely tied to the first in this case. It is the issue of religion. Tiare's statement about God punishing her family ought not be taken lightly. In this part of the world, people have relied heavily on their God or gods to bring them food and to protect them from natural disasters for many years. In this case, Tiare is saying that because the family acted poorly in dividing the profits from prior pearl harvests, God decided to punish them. The Tuahu family will certainly seek God's blessing on their venture. What this probably means from a practical standpoint, is that no decision in this case will be made solely on its own merits. Much of the decision making here will be based on faith, intuition, or divine guidance. While students will certainly need to analyze this case according to their best logic, they can come to understand that more intuitive decision making is not unusual in many cultures.

iii. Third, students will come to understand that some cultures have different motivators than others. As mentioned in the case, many Pacific Islanders feel that living simply but enjoying life leisurely is more important than accumulating many material possessions by working extra hard. Rather than being motivated by possessions, they are motivated by relationships and enjoying themselves. This is pointed out in the case when Manea decides to go fishing rather than resolve his dilemma. It is further revealed by the saying, "There is always another coconut in the tree, another taro in the patch"

Another example you may choose to share comes from French Polynesia as well. It seems that a master carver was hired by a hotel to carve them a tiki, or statue in the old style, to grace the grounds of a new hotel being constructed. When asked the price, the carver agreed upon something that seemed quite reasonable. Upon receiving the quote for that tiki, the foreign investor asked what it would cost to produce 9 more tiki that were just the same as the first. The investor naturally expected to receive some kind of volume discount for purchasing ten of the same item. To his surprise, the master carver indicated that the additional nine tikis would come at a per unit price that was actually higher than the price for just one tiki. When asked about the per unit increase in price for the volume order the master carver simply replied, "the first one is fun to carve."

This story reveals something of the character of these people. They enjoy a good life in a beautiful setting, surrounded by family and friends. The motivation to work very hard to improve their lot in life may not be very strong.

Overall then, culture seems to be pushing Manea Tuahu away from restarting pearl cultivation. At the very least, it encourages him to only proceed if he feels that it will preserve family relations and create a reward that compensates him for the extra work. As such, the students might find greater rationale in the lower profit option of leasing lagoon rights than they would in a classic "masculine" culture such as those identified by Geert Hofstede.

NTA EXECUTIVE RETREATS, INC.: A CASE STUDY

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CASE DESCRIPTION

In this case the authors tell the story of a small business startup and the difficulties faced when environment is not considered. This case would be most suitable for undergraduate courses in Entrepreneurship and Strategic Management. The case is designed to be taught in one fifty to seventy-five minute class period, with about thirty minutes of reading and preparation time on the students part, prior to class.

CASE SYNOPSIS

This case is based upon an actual experience. The names of the participants and the company have been changed to maintain confidentiality. This case demonstrates problems that can arise from poor investigation of a location prior to going into business. NTA has discovered that they face significant external environmental risks of which they had previously been unaware.

INSTRUCTORS' NOTES

Discussion Questions

1. Why did David Lee open NTA Executive Retreats?

The NTA Martial Art Academy had grown into a successful business, but its profit potential was limited. When Lee first opened the martial art studio, he faced limited competition in the immediate area. Currently, competitors are expanding directly into his territory and competition is becoming fierce. The increase in competition is making his product more commoditized and threatens his margins.

Students in part select a martial art studio based upon the quality of the instruction. David Lee is the source of advantage for this business, but he has limited time to devote to the business given his other interests. Further, having classes in a fixed facility limits class size and therefore limits profit potential. David Lee needed to find a business that was seen as offering a unique product where he could increase the amount he could charge for his services.

The executive retreat business was a natural extension of his current business. His existing students were an initial customer source for the new venture as well as a source of employees. The established reputation of the NTA Martial Art Academy could be used to provide immediate legitimacy and trust for the new product. David Lee's contacts in the business community, as a result of the other businesses he owned and operated, were a source of referrals for his new venture. Further, the high capital requirements for owning and operating a retreat facility were a significant barrier to entry for other martial art academies. Consequently, the limited competition would allow Lee to charge higher prices and thereby achieve higher margins.

2. Why did David Lee select a location two hours from Silicon Valley for his new venture?

The remote location was necessary for several reasons. First, it would not have been economically feasible to purchase such a large tract of land so close to Silicon Valley. Second, the concept of a retreat is to remove the client from their normal surroundings. Third, a location two hours from Silicon Valley reinforced the concept of separation from the normal routine of the customer yet was close enough that the trip would not seem difficult. Finally, a primitive setting would not have felt genuine inside the boundaries of a major metropolitan area.

3. Describe the nature of NTA's industry using a Porter's Five Forces framework.

NTA's buyers had considerable power due to low switching costs. It was an industry practice to raise switching costs by requiring Academy members to enroll for twelve months at a time. However, this policy used by both martial art academies and health clubs frequently resulted in conflicts with customers.

Suppliers to the business had limited power. While national chains could negotiate better prices due to larger purchase commitments, the cost of supplies was not material to NTA's operations and multiple suppliers were available to the company.

Rivalry within the fragmented health club industry was fierce. Substitutes for NTA services, such as traditional health clubs, jogging trails, and home exercise equipment were readily available, although substitutes for NTA Executive Retreats were not.

The risk of potential new competitors in the martial art academy business was high due to low entry barriers and the continued influx of Asian immigrants into the area.

However, for the executive retreat business, high capital costs and limited suitable locations created significant entry barriers.

Overall, the martial art academy business was not particularly attractive, but the executive retreat business held promise.

4. Prepare a SWOT analysis for NTA Executive Retreats.

Strengths

- ♦ Daniel Lee's resources, as well as his personal skills, knowledge, and abilities.
- ♦ Credentials and reputation in the industry
- ♦ Proven entrepreneurial and business experience
- ♦ Established contacts and local market knowledge
- ♦ Financial resources and credit rating
- ♦ Science background (allows him to easily relate with Silicon Valley hi-tech executives)
- ♦ Synergies and shared resources with Lee's other businesses (legal/tax counsel, banking, printing, promotion, etc.)
- ♦ NTA's ability to operate at high profit margins.

Weaknesses

- ♦ NTA's dependence upon Lee who is sharing time between many different ventures. If Lee's other businesses demand his time, NTA will suffer since there is no one to conduct the retreats. There are no slack human resources in NTA
- ♦ Lee's need for control and resistance to delegation
- ♦ Local market was saturated with respect to the martial art academy

Opportunities

- ♦ Produce inspirational videos and tape programs for sale to students (and outside sales)
- ♦ Franchising martial art schools with Lee's students
- ♦ Growing demand for executive stress reduction products as a result of the rapid expansion of the high technology businesses in Silicon Valley
- ♦ Expanded training programs for law enforcement agencies on the property could be both a source of income and a source of protection from the narcotic growers

Threats

- Increasing Asian immigration was producing a larger pool of qualified martial arts instructors. Coupled with low school startup costs, there was significant risk from new entrants.
- Increasing popularity of full service fitness clubs that were beginning to offer martial arts classes.
- Federal and State laws allowed for the seizure of any lands where illegal narcotics were found growing. Due to the size and remote nature of NTA's property, neighbors that were growing illegal narcotics could encroach onto NTA land, making the property subject to seizure.

Students should be asked to prepare a list of strategic alternatives for NTA and evaluate them in light of the SWOT analysis with the ultimate goal of selecting an appropriate course of action. In fragmented industries, the use of niche strategies is appropriate, emphasizing customer service. Lee does this well.

EPILOGUE

Lee immediately discontinued NTA Executive Retreat operations and put the property up for sale, which sold three years later for $1,200,000. The executive retreats were suspended for about a year until Lee found a 200-acre parcel, 30 minutes from NTA, that he could rent on a daily basis. The local facility was safe, but lacked the seclusion necessary to provide the experience Lee and his customers demanded. Enrollment fell and Lee lost interest.

WEB ASSURANCE SEALS – ARE THEY ALL ALIKE?: A LOOK AT WebTrust AND OTHER WEB ASSURANCE SEALS

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CASE DESCRIPTION

The primary subject matter of this case concerns the CPA's requirements and responsibilities for performing a WebTrust attestation service engagement. Additionally, this case provides a framework for discussion on the control issues with information systems. This case has a difficulty level of three, appropriate for junior-level courses. This case is designed to be taught in one class hour and is expected to require ten hours of outside preparation by students.

CASE SYNOPSIS

Patricia Greene, CPA is approached by Bill Miller, president of E-commerce.com, who is inquiring about web assurance seals. Mr. Miller wants to know what web seal programs are available and what requirements does his company have to meet to display a seal on its website. Ms. Greene, CPA has the task of identifying and comparing the various web seal programs. Additionally, she needs to investigate the requirements and responsibilities for performing a WebTrust engagement. Finally, she needs to communicate her findings to Mr. Miller.

INSTRUCTORS' NOTES

Timeframe and Sequencing of the Case

The case can be assigned to individual students or to teams of students. We recommend that teams should not be comprised of more than four students. The case should be broken in the four steps. Each step should be worth ¼ of the total grade and be assigned for completion over a specified period of time, as follows.

- **Step 1**: (25 points) Website Policies and Web Assurance Seals. This is a relatively easy assignment. Students should complete this step and be prepared to present their results in one week.

- **Step 2**: (25 points) Seal Program Assurances and Merchant Requirements. This is a more involved assignment, but because it was limited to only four web seal programs, students should complete this step and be prepared to present their results in one week.

- **Step 3**: (25 points) Investigating Professional Guidance. This is a much more involved assignment, and caution students about this. Students will have to investigate eight different professional standards. Many will be eliminated quickly if the students read the first few pages of each standard carefully. However, AT101 and AT201 will require an investigation of much greater depth. The questionnaires are designed to focus their investigations, but there is much material in these two standards. We recommend that students be given two weeks to complete this step.

- **Step 4**: (25 points) Communicating Your Findings to the Client. This step is inextricably tied to Step 3 and it is better if students prepare the correspondence immediately after completing Step 3 while the information is fresh in their minds. We recommend that Steps 3 and 4 be completed simultaneously.

One class period of 50 minutes will be needed to introduce the case and the professional standards. Figure 1 - *Different CPA Practitioner Services*, appearing in the student's case study, provided an overview of the various practitioner services and the applicable professional standards. It is particularly important that students understand that Trust Services are attestation engagements and that both WebTrust and SysTrust are this type of engagement. It is important for students to understand that a practitioner may report on a written assertion or may report directly on the subject matter (AU Section 101.09). With respect to a WebTrust engagement the practitioner will be reporting on the subject matter. We also recommend that one class period of 50 minutes be used to review the students' findings and to correct any misconceptions they may have.

Step 1: Website Policies and Web Assurance Seals

There are no standard solutions to this step or for the contents of Exhibit 1. Students could visit any variety of websites and find as many different web assurance seals. Equally, they will discover a wide variety of customer policies. Have the students discuss their findings in class. Our experience has been that many students have made purchases over the Internet. However, for many students, this will be the first time that they seriously looked at the firms' policy statements. It is often an eye-opening experience for them - many answers will be "No" or "Doesn't Say" for specific websites.

Step 2: Seal Program Assurances and Merchant Requirements

We selected only four web assurance seals for students to investigate. This made the material manageable for them, given the time frame allowed for the exercise. There was another motivation for selecting these specific four seal programs. This is a dynamic environment. Web seal programs have come and gone. For example, several highly specialized web seal programs have evolved for pharmaceuticals and other specialized industries. Within the general retail sector however, many different seal programs appeared and just as many have disappeared. To name only a couple, we could no longer find an Internet reference to the AOL Certified Merchant program criteria and Gomez Certified no longer produces a web assurance seal. The four seal programs assigned to the students, at least still exist. These are voluntary programs and many seal programs that were rigorous to comply with or costly for merchants apparently have not survived. The solutions for BBBOnLine, TRUSTe, WebTrust, and ePublicEye appear in Exhibits 4, 5, 6, and 7.

EXHIBIT 4. QUESTIONNAIRE FOR BBBOnLine IN STEP 2

Web Seal Program Name:	**BBBOnLine**		
Section A. e-commerce assurance concerns of the web assurance seal program.	**Yes**	**No**	**Doesn't Say**
Data Security: Does the seal program require the merchant to provide data security that does the following?			
• Merchant must provide security for data transmitted from the consumer to the web site (i.e., have a secure server transaction system).	X		
• Merchant must provide security for data that appears on the web site that will be used by the consumer to make transaction decision.			X
Business Policies: Does the seal program require the merchant to have business policies that provide the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., shipping, billing, payments, returns, sales tax)	X		
• Merchant must adopt business policies previously established by the seal program rather than develop his / her own policies.	X		
• Merchant is allowed to write his / her own business policies if the policies comply with principles approved by an acceptable body.			X
• Merchant is required to maintain a history of adhering to its own policies.			X
• Merchant must demonstrate a history of not changing these policies frequently.			X

EXHIBIT 4. QUESTIONNAIRE FOR BBBOnLine IN STEP 2			
Web Seal Program Name: BBBOnLine			
Section A. e-commerce assurance concerns of the web assurance seal program.	**Yes**	**No**	**Doesn't Say**
Transaction Integrity: Does the seal program require the merchant to provide transaction processing integrity?	**Yes**	**No**	**Doesn't Say**
• Merchant must properly process all transactions only after gaining the consumer's agreement.	X		
• Merchant must respond to consumer inquiries / complaints in a timely manner.	X		
• Merchant must use agreed-to shipping and pricing data.	X		
• Merchant must resolve all customer problems in a prompt manner.	X		
• Merchant must provide a means for consumers to communicate with the merchant regarding inquiries, follow-up, or complaints.	X		
Data Privacy: Does the seal program require the merchant to provide data privacy that does the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., consumer data privacy principles).	X		
• Merchant must keep transaction and personal information about the consumer confidential.			X
• Merchant must adopt privacy policies previously established by the seal program rather than develop his / her own policies.	X		
• Merchant is allowed to write his/her own privacy policies if the policies comply with principles approved by an acceptable body.			X
• Merchant must allow the consumer to verify or correct his / her personal data that is maintained on the merchant's computer.			X
• Merchant must release or use data only as agreed to by the consumer, except as needed to complete the transaction.			X
• Merchant must protect the consumer's computer from viruses or "cookies", except as needed to complete the transaction.			X
Seal Program Activities: Does the seal program perform activities on behalf of consumers in the following areas?	**Yes**	**No**	**Doesn't Say**
• Merchant must allow consumers to voluntarily document their experiences via the seal program website.	X		
• Merchant must let the seal program summarize or rank consumer experiences with the merchant's history of honoring its policies.	X		
• Merchant must agree to arbitration, let the web seal program intervene on the customer's behalf, or have a similar resolution process.	X		

EXHIBIT 4. QUESTIONNAIRE FOR BBBONLINE IN STEP 2 (CONTINUED)			
Section B. Specific requirements of the firm to be able to display the seal.	**Yes**	**No**	**Doesn't Say**
Self-Reporting Activities: Does the seal program require merchants to self-report the following items?			
• Proof of having conducted business for a specified period of time.	X		
• Agree to abide by the seal program's requirements.	X		
• Pay a license fee.	X		
• Install the seal or consumer links to the seal program website.	X		
• Purchase or install security software or hardware provided by the seal program.			X
• Profess that the merchant has full online ordering capability.			X
Independent Evaluations: Does the seal program require merchants to have an initial evaluation as follows?	**Yes**	**No**	**Doesn't Say**
• Let a third party to confirm the existence of the merchant.			X
• Let seal program representatives confirm the merchant's existence via an on-site visit.	X		
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.	X		
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X
Renewal Requirements: Are specific actions by merchants required to renew their ability to display the seal?	**Yes**	**No**	**Doesn't Say**
• Pay a renewal license fee.			X
• Not have significant consumer complaints about failure to follow its own stated policies or to quickly resolve consumer problems.	X		
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.	X		
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria **only if severe violations were noted in previous merchant performance**			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X

EXHIBIT 4. QUESTIONNAIRE FOR BBBONLINE IN STEP 2 (CONTINUED)					
How thoroughly do you feel that the website seal program addresses e-commerce assurance objectives? (Check one answer for each of the assurance concerns)	**Very Good**	**Good**	**Fair**	**Poor**	**Very Poor**
• Data Security					
• Business Policies					
• Transaction Integrity					
• Data Privacy					
• Seal Program Activities					
Would this web seal program require a CPA practitioner to make statements that the merchant met all the web seal program's criteria in order to obtain, display, or renew the web assurance seal? (Check one answer)			**Yes**	**No**	
				X	

EXHIBIT 5. QUESTIONNAIRE FOR TRUSTE IN STEP 2			
Web Seal Program Name: **TRUSTe**			
Section A. e-commerce assurance concerns of the web assurance seal program.	**Yes**	**No**	**Doesn't Say**
Data Security: Does the seal program require the merchant to provide data security that does the following?			
• Merchant must provide security for data transmitted from the consumer to the web site (i.e., have a secure server transaction system).	X		
• Merchant must provide security for data that appears on the web site that will be used by the consumer to make transaction decision.			X
Business Policies: Does the seal program require the merchant to have business policies that provide the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., shipping, billing, payments, returns, sales tax).			X
• Merchant must adopt business policies previously established by the seal program rather than develop his / her own policies.			X
• Merchant is allowed to write his / her own business policies if the policies comply with principles approved by an acceptable body.			X
• Merchant is required to maintain a history of adhering to its own policies.			X
• Merchant must demonstrate a history of not changing these policies frequently.			X
Transaction Integrity: Does the seal program require the merchant to provide transaction processing integrity?	**Yes**	**No**	**Doesn't Say**
• Merchant must properly process all transactions only after gaining the consumer's agreement.		X	

EXHIBIT 5. QUESTIONNAIRE FOR TRUSTE IN STEP 2

Web Seal Program Name:	**TRUSTe**		
Section A. e-commerce assurance concerns of the web assurance seal program.	**Yes**	**No**	**Doesn't Say**
• Merchant must respond to consumer inquiries/complaints in a timely manner	X		
• Merchant must use agreed-to shipping and pricing data.			X
• Merchant must resolve all customer problems in a prompt manner.	X		
• Merchant must provide a means for consumers to communicate with the merchant regarding inquiries, follow-up, or complaints.	X		
Data Privacy: Does the seal program require the merchant to provide data privacy that does the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., consumer data privacy principles).	X		
• Merchant must keep transaction and personal information about the consumer confidential.		X	
• Merchant must adopt privacy policies previously established by the seal program rather than develop his / her own policies.		X	
• Merchant is allowed to write his/her own privacy policies if the policies comply with principles approved by an acceptable body.	X		
• Merchant must allow the consumer to verify or correct his / her personal data that is maintained on the merchant's computer.	X		
• Merchant must release or use data only as agreed to by the consumer, except as needed to complete the transaction.	X		
• Merchant must protect the consumer's computer from viruses or "cookies", except as needed to complete the transaction.			X
Seal Program Activities: Does the seal program perform activities on behalf of consumers in the following areas?	**Yes**	**No**	**Doesn't Say**
• Merchant must allow consumers to voluntarily document their experiences via the seal program website.	X		
• Merchant must let the seal program summarize or rank consumer experiences with the merchant's history of honoring its policies.			X
• Merchant must agree to arbitration, let the web seal program intervene on the customer's behalf, or have a similar resolution process.	X		

EXHIBIT 5. QUESTIONNAIRE FOR TRUSTe IN STEP 2 (CONTINUED)			
Section B. Specific requirements of the firm to be able to display the seal.			
Self-Reporting Activities: Does the seal program require merchants to self-report the following items?	**Yes**	**No**	**Doesn't Say**
• Proof of having conducted business for a specified period of time.			X
• Agree to abide by the seal program's requirements.	X		
• Pay a license fee.	X		
• Install the seal or consumer links to the seal program website.	X		
• Purchase or install security software or hardware provided by the seal program.			X
• Profess that the merchant has full online ordering capability.			X
Independent Evaluations: Does the seal program require merchants to have an initial evaluation as follows?	**Yes**	**No**	**Doesn't Say**
• Let a third party to confirm the existence of the merchant.			X
• Let seal program representatives confirm the merchant's existence via an on-site visit. **[ONLY FOR UNLAUNCHED WEBSITES]**	X		
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.	X		
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.	X		
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X
Renewal Requirements: Are specific actions by merchants required to renew their ability to display the seal?	**Yes**	**No**	**Doesn't Say**
• Pay a renewal license fee.	X		
• Not have significant consumer complaints about failure to follow its own stated policies or to quickly resolve consumer problems.	X		
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.	X		
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.	X		
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria **only if severe violations were noted in previous merchant performance**	X(*)		
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X

EXHIBIT 5. QUESTIONNAIRE FOR TRUSTe IN STEP 2 (CONTINUED)					
Section B. Specific requirements of the firm to be able to display the seal.					
How thoroughly do you feel that the website seal program addresses e-commerce assurance objectives? (Check one answer for each of the assurance concerns)	**Very Good**	**Good**	**Fair**	**Poor**	**Very Poor**
• Data Security					
• Business Policies					
• Transaction Integrity					
• Data Privacy					
• Seal Program Activities					
Would this web seal program require a CPA practitioner to make statements that the merchant met all the web seal program's criteria in order to obtain, display, or renew the web assurance seal? (Check one answer)			**Yes(*)**	**No**	
			X	X	
(*) links together the responses for renewal requirements with the web seal program					

EXHIBIT 6. QUESTIONNAIRE FOR WEBTRUST IN STEP 2			
Web Seal Program Name: **WebTrust**			
Section A. e-commerce assurance concerns of the web assurance seal program.			
Data Security: Does the seal program require the merchant to provide data security that does the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must provide security for data transmitted from the consumer to the web site (i.e., have a secure server transaction system).	X		
• Merchant must provide security for data that appears on the web site that will be used by the consumer to make transaction decision.	X		
Business Policies: Does the seal program require the merchant to have business policies that provide the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., shipping, billing, payments, returns, sales tax).	X		
• Merchant must adopt business policies previously established by the seal program rather than develop his / her own policies.		X	
• Merchant is allowed to write his / her own business policies if the policies comply with principles approved by an acceptable body.	X		
• Merchant is required to maintain a history of adhering to its own policies.	X		
• Merchant must demonstrate a history of not changing these policies frequently.			X

EXHIBIT 6. QUESTIONNAIRE FOR WEBTRUST IN STEP 2			
Web Seal Program Name: WebTrust			
Section A. e-commerce assurance concerns of the web assurance seal program.			
Transaction Integrity: Does the seal program require the merchant to provide transaction processing integrity?	**Yes**	**No**	**Doesn't Say**
• Merchant must properly process all transactions only after gaining the consumer's agreement.	X		
• Merchant must respond to consumer inquiries / complaints in a timely manner.	X		
• Merchant must use agreed-to shipping and pricing data.	X		
• Merchant must resolve all customer problems in a prompt manner.	X		
• Merchant must provide a means for consumers to communicate with the merchant regarding inquiries, follow-up, or complaints.	X		
Data Privacy: Does the seal program require the merchant to provide data privacy that does the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., consumer data privacy principles).	X		
• Merchant must keep transaction and personal information about the consumer confidential.		X	
• Merchant must adopt privacy policies previously established by the seal program rather than develop his / her own policies.		X	
• Merchant is allowed to write his/her own privacy policies if the policies comply with principles approved by an acceptable body.	X		
• Merchant must allow the consumer to verify or correct his / her personal data that is maintained on the merchant's computer.	X		
• Merchant must release or use data only as agreed to by the consumer, except as needed to complete the transaction.	X		
• Merchant must protect the consumer's computer from viruses or "cookies", except as needed to complete the transaction.	X		
Seal Program Activities: Does the seal program perform activities on behalf of consumers in the following areas?	**Yes**	**No**	**Doesn't Say**
• Merchant must allow consumers to voluntarily document their experiences via the seal program website.			X
• Merchant must let the seal program summarize or rank consumer experiences with the merchant's history of honoring its policies.		X	
• Merchant must agree to arbitration, let the web seal program intervene on the customer's behalf, or have a similar resolution process.		X	

EXHIBIT 6. QUESTIONNAIRE FOR WEBTRUST IN STEP 2 (CONTINUED)			
Section B. Specific requirements of the firm to be able to display the seal.			
Self-Reporting Activities: Does the seal program require merchants to self-report the following items?	**Yes**	**No**	**Doesn't Say**
• Proof of having conducted business for a specified period of time.			X
• Agree to abide by the seal program's requirements.	X		
• Pay a license fee. **[ENGAGEMENT CHARGES OF CPA PRACTITIONER]**	X		
• Install the seal or consumer links to the seal program website.	X		
• Purchase or install security software or hardware provided by the seal program.		X	
• Profess that the merchant has full online ordering capability.	X		
Independent Evaluations: Does the seal program require merchants to have an initial evaluation as follows?	**Yes**	**No**	**Doesn't Say**
• Let a third party to confirm the existence of the merchant. **[CPA PRACTITIONER]**	X		
• Let seal program representatives confirm the merchant's existence via an on-site visit.		X	
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.		X	
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.	X		
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.		X	
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.	X		
Renewal Requirements: Are specific actions by merchants required to renew their ability to display the seal?	**Yes**	**No**	**Doesn't Say**
• Pay a renewal license fee. [**ENGAGEMENT CHARGES OF CPA PRACTITIONER]**	X		
• Not have significant consumer complaints about failure to follow its own stated policies or to quickly resolve consumer problems.	X		
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.		X	
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.	X		
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.		X	
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria **only if severe violations were noted in previous merchant performance**		X	
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.	X		

EXHIBIT 6. QUESTIONNAIRE FOR WEBTRUST IN STEP 2 (CONTINUED)

Section B. Specific requirements of the firm to be able to display the seal.

How thoroughly do you feel that the website seal program addresses e-commerce assurance objectives? (Check one answer for each of the assurance concerns)	**Very Good**	**Good**	**Fair**	**Poor**	**Very Poor**
• Data Security					
• Business Policies					
• Transaction Integrity					
• Data Privacy					
• Seal Program Activities					

Would this web seal program require a CPA practitioner to make statements that the merchant met all the web seal program's criteria in order to obtain, display, or renew the web assurance seal? (Check one answer)	**Yes**	**No**	
	X		

EXHIBIT 7. QUESTIONNAIRE FOR ePUBLICEYE IN STEP 2

Web Seal Program Name:	**ePublicEye**

Section A. e-commerce assurance concerns of the web assurance seal program.

Data Security: Does the seal program require the merchant to provide data security that does the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must provide security for data transmitted from the consumer to the web site (i.e., have a secure server transaction system).			X
• Merchant must provide security for data that appears on the web site that will be used by the consumer to make transaction decision.			X
Business Policies: Does the seal program require the merchant to have business policies that provide the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., shipping, billing, payments, returns, sales tax).			X
• Merchant must adopt business policies previously established by the seal program rather than develop his / her own policies.			X
• Merchant is allowed to write his / her own business policies if the policies comply with principles approved by an acceptable body.			X
• Merchant is required to maintain a history of adhering to its own policies.			X
• Merchant must demonstrate a history of not changing these policies frequently.			X
Transaction Integrity: Does the seal program require the merchant to provide transaction processing integrity?	**Yes**	**No**	**Doesn't Say**
• Merchant must properly process all transactions only after gaining the consumer's agreement.			X

EXHIBIT 7. QUESTIONNAIRE FOR ePUBLICEYE IN STEP 2			
Web Seal Program Name: **ePublicEye**			
Section A. e-commerce assurance concerns of the web assurance seal program.			
• Merchant must respond to consumer inquiries / complaints in a timely manner.		X	
• Merchant must use agreed-to shipping and pricing data.			X
• Merchant must resolve all customer problems in a prompt manner.		X	
• Merchant must provide a means for consumers to communicate with the merchant regarding inquiries, follow-up, or complaints.			X
Data Privacy: Does the seal program require the merchant to provide data privacy that does the following?	**Yes**	**No**	**Doesn't Say**
• Merchant must display understandable and consistent policies on the website (e.g., consumer data privacy principles).	X		
• Merchant must keep transaction and personal information about the consumer confidential.			X
• Merchant must adopt privacy policies previously established by the seal program rather than develop his / her own policies.		X	
• Merchant is allowed to write his / her own privacy policies if the policies comply with principles approved by an acceptable body.			X
• Merchant must allow the consumer to verify or correct his / her personal data that is maintained on the merchant's computer.			X
• Merchant must release or use data only as agreed to by the consumer, except as needed to complete the transaction.			X
• Merchant must protect the consumer's computer from viruses or "cookies", except as needed to complete the transaction.			X
Seal Program Activities: Does the seal program perform activities on behalf of consumers in the following areas?	**Yes**	**No**	**Doesn't Say**
• Merchant must allow consumers to voluntarily document their experiences via the seal program website.	X		
• Merchant must let the seal program summarize or rank consumer experiences with the merchant's history of honoring its policies.	X		
• Merchant must agree to arbitration, let the web seal program intervene on the customer's behalf, or have a similar resolution process.		X	

EXHIBIT 7. QUESTIONNAIRE FOR ePUBLICEYE IN STEP 2 (CONTINUED)			
Section B. Specific requirements of the firm to be able to display the seal.			
Self-Reporting Activities: Does the seal program require merchants to self-report the following items?	**Yes**	**No**	**Doesn't Say**
• Proof of having conducted business for a specified period of time.			X
• Agree to abide by the seal program's requirements.	X		
• Pay a license fee.	X		
• Install the seal or consumer links to the seal program website.	X		
• Purchase or install security software or hardware provided by the seal program.		X	
• Profess that the merchant has full online ordering capability.			X
Independent Evaluations: Does the seal program require merchants to have an initial evaluation as follows?	**Yes**	**No**	**Doesn't Say**
• Let a third party confirm the existence of the merchant.			X
• Let seal program representatives confirm the merchant's existence via an on-site visit.			X
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.	X		
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X
Renewal Requirements: Are specific actions by merchants required to renew their ability to display the seal?	**Yes**	**No**	**Doesn't Say**
• Pay a renewal license fee.	X		
• Not have significant consumer complaints about failure to follow its own stated policies or to quickly resolve consumer problems.			X
• Let seal program representatives determine if the merchant fully discloses policies, **without** testing actual merchant performance.	X		
• Let seal program representatives conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X
• Engage an independent auditor to determine if the merchant fully discloses policies, **without** testing actual merchant performance.			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria **only if severe violations were noted in previous merchant performance**			X
• Engage an independent auditor to conduct tests to see if the merchant adheres to stated policies and meets performance criteria.			X

EXHIBIT 7. QUESTIONNAIRE FOR ePUBLICEYE IN STEP 2 (CONTINUED)					
Section B. Specific requirements of the firm to be able to display the seal.					
How thoroughly do you feel that the website seal program addresses e-commerce assurance objectives? (Check one answer for each of the assurance concerns)	**Very Good**	**Good**	**Fair**	**Poor**	**Very Poor**
• Data Security					
• Business Policies					
• Transaction Integrity					
• Data Privacy					
• Seal Program Activities					
Would this web seal program require a CPA practitioner to make statements that the merchant met all the web seal program's criteria in order to obtain, display, or renew the web assurance seal? (Check one answer)			**Yes**	**No**	
				X	

- **BBBOnLine**: The questionnaire's answers can be obtained by accessing several web pages. Starting from http://www.bbbonline.org, we accessed web pages with the titles "Reliability Program Requirements", "Frequently Asked Questions", "Dispute Resolution", "Apply for the Reliability Seal", and the "Code of Online Business Practices".

- **TRUSTe**: Answers to the questions were obtained from several web pages accessible from http://www.truste.org with the titles "For Consumers - The TRUSTe Program: How It Protects Your Privacy", "Seal Programs - Trustee Program Principles", "Seal Programs - How to Join the Privacy Seal Program", "Seal Programs - TRUSTe Oversight", "Seal Programs - Resolution Process", and the actual self assessment application document titled "TRUSTe License Agreement - 8.0 Self-Assessment". *TRUSTe is marked "Yes" in the final question about whether a CPA practitioner is needed to attest to the merchant meeting all web seal criteria, but this is true in only one situation - when the merchant has had prior serious violations of policy and the merchant is attempting to renew the seal.*

- **WebTrust**: Starting from http://www.aicpa.org, a keyword search for "WebTrust" yielded a web page titled "Frequently Asked Questions About WebTrust". Also the AICPA main page contained connections to the WebTrust program via "New Innovative Services for CPAs", which yielded a different web page titled "WebTrust - Frequently Asked Questions About WebTrust" (this web page revealed the competencies expected of CPAs who provide WebTrust services) and a very useful 93-page document titled "Suitable Trust Service Criteria and Illustrations". Other useful WebTrust web pages were identified as "Consumers" and "Online Business - Overview of the WebTrust Program".

- **ePublicEye**: Starting from http://www.epubliceye.com, we accessed a variety of web pages with the titles "Your Guide to Companies With Nothing to Hide", "Compare Programs", "Providing the Intelligence to Build Trust", "Disclaimer", "Frequently Asked Questions", "Does Your Web Site Pass the Trust Test?", "Terms of Membership", and the actual online merchant application titled "Now We Need to Get to Know You" accessed vial a connection labeled "Apply Here!". S*tudents can be misled by the ePublicEye web site and will have to further confirm all claims made by the seal program.* For example, on the "Compare Programs" web page, in several places it indicates that the merchants are continuously "monitored". In fact, the only monitoring that is done is via consumer complaints and ratings, with ePublicEye monitoring the complaints. The "Compare Programs" web page also asserts that a complaint resolution mechanism exists. In fact, on subsequent web pages, it turns out that ePublicEye does not mediate complaints and dispute resolution is voluntary (based on the merchant's desire not to develop a bad reputation).

In the solution exhibits, we do not provide a recommended answer for the question about how thoroughly the website seal program addresses e-commerce assurance objectives (i.e., "Very Good" through "Very Poor"). Students will arrive at their own impressions about this question. Obviously, the more thorough the assurance coverage by the web seal program, the higher the answer should be.

Discuss with students why a seal program might or might not continue in existence. Have different student teams present their findings for specific web seal programs. Students are often surprised at how many of the e-commerce assurance concerns are not addressed by the individual web seal programs. Even more surprising are the number of answers they give under the "Doesn't Say" column, which means that the web seal programs often don't address the issues. Most students will surmise that many web seal programs are worth very little in terms of giving consumers a real sense of security and confidentiality. WebTrust will stand out as the notable exception with regard to its thoroughness and it is the only program that requires a CPA practitioner to attest to merchant's compliance with the seal program requirements.

Step 3: Investigating Professional Guidance

Students were asked to investigate eight different professional standards. They should quickly eliminate six standards as inappropriate for a practitioner to evaluate a web assurance seal program. Rationale follows:

- **AT301 -** Financial Forecasts and Projections. This standard applies to attestations related to prospective financial statements or partial prospective financial statements. Prospective financial statements are financial forecasts or financial projections built on actions, plans, or assumptions made by the responsible party. A web assurance seal program is unrelated to prospective financial statements. This standard cannot be used for an attestation engagement related to a web assurance seal program. After checking "No" in the two boxes in Section B of the questionnaire, the remainder of the questionnaire will be blank. We do not provide an exhibit for this questionnaire.

- **AT401** - Reporting on Pro Forma Financial Information. This standard applies to attestations related to pro forma financial information, that is, financial information designed to show what the significant effects on historical financial information might have been had a transaction or event occurred at an earlier date. A web assurance seal program is unrelated to pro forma financial information. This standard cannot be used for an attestation engagement related to a web assurance seal program. After checking "No" in the two boxes in Section B of the questionnaire, the remainder of the questionnaire will be blank. We do not provide an exhibit for this questionnaire.

- **AT501** - Reporting on an Entity's Internal Control Over Financial Reporting. This standard applies to attestation engagements where a CPA practitioner in engaged to provide an examination report on the effectiveness of an entity's internal control system over financial reporting; that is, internal controls that pertain to an entity's ability to initiate, record, process, and report financial data consistent with the assertions embodied in either annual financial statements or interim financial statements, or both. Such an engagement would apply only tangentially to B2B or B2C e-commerce transactions or to a web seal assurance program. This standard cannot be used for an attestation engagement related to a web assurance seal program. After checking "No" in the two boxes in Section B of the questionnaire, the remainder of the questionnaire will be blank. We do not provide an exhibit for this questionnaire.

- **AT601** - Compliance Attestation. This standard applies to attestation engagements related to either the entity's compliance with requirements of specific laws, regulations, rules, contracts, or grants, or how effectively it complies with the same. In another source it states that Trust Services engagements do not require the CPA practitioner to provide assurances of an entity's compliance with laws, regulations, agreements, or contracts [*Suitable Trust Services Criteria and Illustrations*, p.3]. The AT601 standard cannot be used for an attestation engagement related to a web assurance seal program. After checking "No" in the two boxes in Section B of the questionnaire, the remainder of the questionnaire will be blank. We do not provide an exhibit for this questionnaire.

- **AT701** - Management's Discussion and Analysis. This standard applies to attestation engagements where a CPA practitioner performs an examination or a review of the MD&A prepared pursuant to the rules and regulations of the SEC, which are presented in annual reports to shareholders and in other documents. This standard cannot be used for an attestation engagement related to a web assurance seal program. After checking "No" in the two boxes in Section B of the questionnaire, the remainder of the questionnaire will be blank. We do not provide an exhibit for this questionnaire.

- **CS100** - Consulting Services: Definitions and Standards. This standard applies to consulting services engagements which are undertaken for the specific benefit of the client. Such engagements do not result in attestation opinions or reports to outsiders. This standard cannot be used for an attestation engagement related to a web assurance seal program or any attestation engagement. After checking "No" in the two boxes in Section B of the questionnaire, the remainder of the questionnaire will be blank. We do not provide an exhibit for this questionnaire. It is interesting to note that due to the great flexibility offered under consulting standards, some students may lose sight of the need for an opinion and suggest that consulting standards can be used for this purpose. You will need to emphasize that consulting standards do not apply where the CPA practitioner will render an opinion upon which third parties will rely.

This leaves only two standards that are potential candidates for an attestation engagement for a web assurance seal program - AT101 and AT201. We provide the solutions for these two standards in Exhibits 8 and 9.

- **AT101 -** Attest Engagements. This standard provides an overview of attest engagements and specific guidance for examination and review engagements. Key points of the students' investigation are shown in Exhibit 8. After AT101 introduces agreed-upon procedures engagements, it relegates further discussion on this topic to AT201. The instructor should guide the discussion of this standard to ensure that the following key points are brought out.

EXHIBIT 8. QUESTIONNAIRE FOR AT101 IN STEP 3

Section A. Identify the professional standard you are reviewing.

Identify the Standard by number (e.g., AT101, AT201, CS100, etc.) and write the exact title.	**AT101 - Attest Engagements**
Briefly summarize the stated purpose of the standard (e.g., when it is appropriate to use this specific standard).	**Used when a CPA practitioner is engaged to issue an examination, a review, or an agreed-upon procedures report on assertions or subject matter that is the responsibility of another party.**

Section B. With regard to this specific professional standard, can this standard be used by a CPA practitioner to support an engagement designed to accomplish the following purpose?	**Yes**	**No**	**Don't Know**
To perform an attest level engagement for the purpose of obtaining a web assurance seal to display on the client's website.	X		
To perform an attest level engagement on certain procedures related to the Trust Services principles.	X		

If you answered "No" to BOTH of the questions above, SKIP THE REMAINING SECTIONS of this questionnaire.

If you answered "Yes" to ONE OR BOTH questions above, complete the remaining sections of this questionnaire.

Section C. Identify the characteristics required of the investigation.		**Yes**	**No**	**Don't Know**
Does the professional standard require that a "responsible party" be identified who will provide the assertions or who is responsible for the subject matter being investigated?		X		
For a web assurance engagement, who would be the "responsible party" if one is needed?	The management of the client who engages the CPA practitioner to evaluate the web site	X		
	The organization that administers the web seal program		X	
	The CPA practitioner who was hired to conducting the investigation		X	
Where could the criteria come from that will be used to evaluate the assertions or the subject matter being evaluated?	The client or party responsible for the subject matter being investigated	X		
	A body designated by the AICPA governing council	X		
	Groups composed of experts who follow due process procedures	X		
	Industry associations	X		
	Other groups who do not follow due process procedures	X		
What type(s) of investigation(s) can be performed under this standard? **(Use your answer here to guide your answers to Sections D, E & F below.)**	Examination	X		
	Review	X		
	Agreed-Upon Procedures	X		
	Consulting Services Engagement		X	

<table>
<tr><th colspan="5">EXHIBIT 8. QUESTIONNAIRE FOR AT101 IN STEP 3 (CONTINUED)</th></tr>
<tr><th colspan="2">Section D. Report Type: For only each type of investigation checked in Section C above, indicate the type of report that can be issued.</th><th>Yes</th><th>No</th><th>Don't Know</th></tr>
<tr><td rowspan="4">You checked an EXAMINATION investigation in Section C above.</td><td>The AICPA places NO restrictions on the content of the report.</td><td></td><td>X</td><td></td></tr>
<tr><td>Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).</td><td>X</td><td></td><td></td></tr>
<tr><td>Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.</td><td></td><td>X</td><td></td></tr>
<tr><td>Report must identify the test(s) performed and the specific findings (express no opinion or negative assurances).</td><td></td><td>X</td><td></td></tr>
<tr><td rowspan="4">You checked a REVIEW investigation in Section C above.</td><td>The AICPA places NO restrictions on the content of the report.</td><td></td><td>X</td><td></td></tr>
<tr><td>Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).</td><td></td><td>X</td><td></td></tr>
<tr><td>Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.</td><td>X</td><td></td><td></td></tr>
<tr><td>Report must identify the test(s) performed and the specific findings (express no opinion or negative assurances).</td><td></td><td>X</td><td></td></tr>
<tr><td rowspan="4">You checked an AGREED-UPON PROCEDURES investigation in Section C above.</td><td>The AICPA places NO restrictions on the content of the report.</td><td></td><td></td><td>X</td></tr>
<tr><td>Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).</td><td></td><td></td><td>X</td></tr>
<tr><td>Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.</td><td></td><td></td><td>X</td></tr>
<tr><td>Report must identify the test(s) performed and the specific findings (express no opinion or negative assurances).</td><td></td><td></td><td>X</td></tr>
<tr><td rowspan="4">You checked a CONSULTING SERVICES engagement in Section C above.</td><td>The AICPA places NO restrictions on the content of the report.</td><td></td><td></td><td></td></tr>
<tr><td>Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).</td><td></td><td></td><td></td></tr>
<tr><td>Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.</td><td></td><td></td><td></td></tr>
<tr><td>Report must identify the test(s) performed and the specific findings (express no opinion or negative assurances).</td><td></td><td></td><td></td></tr>
</table>

EXHIBIT 8. QUESTIONNAIRE FOR AT101 IN STEP 3 (CONTINUED)

Section E. Report Distribution: For only each type of investigation checked in Section C above, indicate how the report can be distributed		**Yes**	**No**	**Don't Know**
You checked an **EXAMINATION** investigation in Section C above.	The AICPA places NO restrictions on the distribution of the report.		X	
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties, or when reporting on subject matter and written assertions were not provided by the responsible party.	X		
	The report must be restricted to specified readers who agree to accept the specific tests performed.		X	
You checked a **REVIEW** investigation in Section C above.	The AICPA places NO restrictions on the distribution of the report.		X	
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties, or when reporting on subject matter and written assertions were not provided by the responsible party.	X		
	The report must be restricted to specified readers who agree to accept the specific tests performed.		X	
You checked an **AGREED-UPON PROCEDURES** investigation in Section C above.	The AICPA places NO restrictions on the distribution of the report.			X
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties, or when reporting on subject matter and written assertions were not provided by the responsible party.			X
	The report must be restricted to specified readers who agree to accept the specific tests performed.			X
You checked a **CONSULTING SERVICES** engagement in Section C above.	The AICPA places NO restrictions on the distribution of the report.			
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties, or when reporting on subject matter and written assertions were not provided by the responsible party.			
	The report must be restricted to specified readers who agree to accept the specific tests performed.			
Section F. General Standards: Within this specific professional standard, indicate if the standard requires CPA practitioner independence or special training		**Yes**	**No**	**Don't Know**
Is independence needed for this engagement?	The AICPA imposes no independence restrictions on the CPA practitioner for this engagement		X	
	The CPA practitioner must not do any other accounting or auditing services during this engagement		X	
	The CPA practitioner must not do any other consulting services for the client during the engagement		X	
	The CPA practitioner must maintain independence in mental attitude (be honest, impartial, unbiased)	X		
	The CPA practitioner must avoid conflicts of interest that would impair the practitioner's objectivity		X	

EXHIBIT 8. QUESTIONNAIRE FOR AT101 IN STEP 3 (CONTINUED)				
Is special training needed for this engagement? *	There are no requirements stated about competence, technical training, proficiency, or special knowledge		X	
	The CPA practitioner must possess additional skills to perform a web assurance engagement.	X		
	The CPA practitioner must possess professional competence in the engagement being undertaken		X	
* HINT: In addition to this specific professional standard look at the WebTrust internet site identified earlier.				

✓ **The Responsible Party**. The client provides the subject matter, which in the case of trust services is the specific controls or evidence that demonstrates that the client has satisfied the specific criteria in a trust services principle. Therefore, the "responsible party" is the management of the client. AT101 specifically prohibits the CPA practitioner from being the responsible party in an attest engagement [AT101.13]. The CPA practitioner will not develop the performance standards used in the engagement. The CPA practitioner will perform the engagement using the criteria dictated by the web seal program.

✓ **The Criteria**. The criteria are the standards which the practitioner evaluates to determine whether the client has satisfied the trust services principles [AT101.24]. While AT101 allows criteria to come from many different sources, in this case, the criteria are defined by the web seal program [AT101.25 through .26].

✓ **Type of Investigation**. AT101 permits three types of investigations: (1) an examination; (2) a review; and (3) agreed-upon procedures. The professional standard expands upon the first two engagements and delays further discussion of agreed-upon procedures to AT201 [AT101.15].

✓ **Report Type**. Students should observe that an examination is the engagement that provides the highest level of assurance with the conclusion expressed in the form of an opinion (e.g., a positive opinion about how effectively the web site met the standards of performance). A review provides only a moderate level of assurance with the conclusion expressed only in the form of a negative assurance (e.g., nothing was observed that led the practitioner to think that the standards were not being met) [AT101.68]. At this time students should not be able to identify the type of report for agreed-upon procedures, as this material is discussed in AT201, thus their response should be "Don't Know" at this time. Also, information about consulting services is irrelevant to AT101. The important point here is that if Ms.

Greene is to express an opinion about how well the client met the web seal program's performance demands, it would require an examination. A review engagement would be insufficient.

✓ **Report Distribution**. The answers are the same for both examination and review engagements. The report is a "general use" report [AT101.68] unless specific restrictions exist [AT101.78]. In this case, one could argue that the criteria used are appropriate only for a limited number of parties, or that Ms. Greene is reporting on only subject matter, or that written assertions have not been provided by the responsible party, and thus the report should be restricted to the client and the web seal program. However, as part of the WebTrust Program, clicking on the WebTrust Seal links the consumer to the CPA's report among other things. Therefore, it must be a "general use" report.

✓ **General Standards (Independence)**. The only mention of independence relates to maintaining independence in "*mental attitude*". This is described as being intellectually honest, impartial, and unbiased. The professional standard goes on to say that "the possession of intrinsic independence is a matter of personal quality rather than of rules that formulate certain objective tests." No mention is made of other services that the CPA practitioner can or cannot perform [AT101.35 through .38]. The last item on this topic in the questionnaire (about avoiding conflicts of interest) does not appear in AT101. Rather, it is stated specifically in the consulting services standard [CS100.07] with a cross reference to the integrity and objectivity standard [ET102.03]. While this always sounds like a reasonable thing to do, it is not stated expressly in AT101.

✓ **General Standards (Special Training)**. AT101 does require the CPA practitioner to have adequate technical training and proficiency [AT101.19] and have adequate knowledge of the subject matter that could be acquired through formal or continuing education, including self-study, or through practical experience [AT101.22]. Ms. Greene has already admitted that she lacks the practical experience in this engagement area, thus some form of education would be required. Students were advised also to check the WebTrust internet site. They should have discovered that additional skills are required to perform a WebTrust engagement. These skills included (1) a working knowledge of internet technologies, protocols and security techniques, (2) specific controls and best practices a company should implement, and (3) other skills as to be outlined soon in the WebTrust competency model. At this time the competency model has not yet been released, you will need to update subsequent to the release of this model. The last item on this topic in the questionnaire (about possessing professional competence) is paraphrased from the consulting services standard [CS100.06], and does not appear in AT101. While it sounds like something that one might expect for all engagements, students were supposed to look for specific wording and AT101 does not state this.

✓ **AT201** - Agreed-Upon Procedures Engagements. This standard expands the guidance specifically for agreed-upon procedure engagements beyond the introduction given them in AT101. Students might argue that an engagement for a web assurance seal could be organized as an agreed-upon procedures engagement. However, in the document entitled "Suitable Trust Services Criteria", agreed-upon procedures engagements are specifically stated as not appropriate for the issuance of a seal. However, the CPA practitioner can perform an agreed-upon procedures engagement related to the Trust Services principles and criteria. In this case, the CPA practitioner could not express an opinion, but only report the tests performed and the specific findings. This is a less likely agenda and inconsistent with the case as stated. Key points of the students' investigation are shown in Exhibit 9.

EXHIBIT 9. QUESTIONNAIRE FOR AT201 IN STEP 3				
Section A. Identify the professional standard you are reviewing.				
Identify the Standard by number (e.g., AT101, AT201, CS100, etc.) and write the exact title.	**AT201 - Agreed-Upon Procedures Engagements**			
Briefly summarize the stated purpose of the standard (e.g., when it is appropriate to use this specific standard).	**Used when a CPA practitioner performs and reports on all agreed-upon procedures engagements. That is an engagement in which the CPA practitioner is engaged to issue a report of findings based upon specific procedures performed on a subject matter**			
Section B. With regard to this specific professional standard, can this standard be used by a CPA practitioner to support an engagement designed to accomplish the following purpose?		**Yes**	**No**	**Don't Know**
To perform an attest level engagement for the purpose of obtaining a web assurance seal to display on the client's website.			X	
To perform an attest level engagement on certain procedures related to the Trust Services principles.		X		
If you answered "No" to BOTH of the questions above, SKIP THE REMAINING SECTIONS of this questionnaire.				
If you answered "Yes" to ONE OR BOTH questions above, complete the remaining sections of this questionnaire.				
Section C. Identify the characteristics required of the investigation.		**Yes**	**No**	**Don't Know**
Does the professional standard require that a "responsible party" be identified who will provide the assertions or who is responsible for the subject matter being investigated?		X		

EXHIBIT 9. QUESTIONNAIRE FOR AT201 IN STEP 3				
For a web assurance engagement, who would be the "responsible party" if one is needed?	The management of the client who engages the CPA practitioner to evaluate the web site			
	The organization that administers the web seal program			
	The CPA practitioner who was hired to conducting the investigation			
Where could the criteria come from that will be used to evaluate the assertions or the subject matter being evaluated?	The client or party responsible for the subject matter being investigated	X		
	A body designated by the AICPA governing council		X	
	Groups composed of experts who follow due process procedures		X	
	Industry associations		X	
	Other groups who do not follow due process procedures		X	
What type(s) of investigation(s) can be performed under this standard? (Use your answer here to guide your answers to Sections D, E & F below.)	Examination		X	
	Review		X	
	Agreed-Upon Procedures	X		
	Consulting Services Engagement		X	

EXHIBIT 9. QUESTIONNAIRE FOR AT201 IN STEP 3 (CONTINUED)				
Section D. Report Type: For only each type of investigation checked in Section C above, indicate the type of report that can be issued.		**Yes**	**No**	**Don't Know**
You checked an **EXAMINATION** investigation in Section C above.	The AICPA places NO restrictions on the content of the report.			
	Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).			
	Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.			
	Report must identify the test(s) performed and the specific findings (express no opinion or negative assurances).			
You checked a **REVIEW** investigation in Section C above.	The AICPA places NO restrictions on the content of the report.			
	Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).			
	Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.			
	Report must identify the test(s) performed and the specific findings (express no opinion or negative assurances).			

EXHIBIT 9. QUESTIONNAIRE FOR AT201 IN STEP 3 (CONTINUED)				
Section D. Report Type: For only each type of investigation checked in Section C above, indicate the type of report that can be issued.		**Yes**	**No**	**Don't Know**
You checked an **AGREED-UPON PROCEDURES** investigation in Section C above.	The AICPA places NO restrictions on the content of the report.		X	
	Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).		X	
	Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.		X	
	Report must identify the test(s) performed and the specific findings(express no opinion or negative assurances).	X		
You checked a **CONSULTING SERVICES** engagement in Section C above.	The AICPA places NO restrictions on the content of the report.			
	Report must express a positive opinion about the assertions or subject matter conforming to the evaluation criteria (unqualified, qualified, adverse, or disclaimer).			
	Report must state that is was a lesser investigation, express no opinion, and express only negative assurances.			
	Report must identify the test(s) performed and the specific findings (express no opinion or negative assurances).			

EXHIBIT 9. QUESTIONNAIRE FOR AT201 IN STEP 3 (CONTINUED)				
Section E. Report Distribution: For only each type of investigation checked in Section C above, indicate how the report can be distributed		**Yes**	**No**	**Don't Know**
You checked an **EXAMINATION** investigation in Section C above.	The AICPA places NO restrictions on the distribution of the report.			
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties, or when reporting on subject matter and written assertions were			
	Not provided by the responsible party.			
	The report must be restricted to specified readers who agree to accept the specific tests performed.			
You checked a **REVIEW** investigation in Section C above.	The AICPA places NO restrictions on the distribution of the report.			
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties,or when reporting on subject matter and written assertions were not provided by the responsible party.			
	The report must be restricted to specified readers who agree to accept the specific tests performed.			

EXHIBIT 9. QUESTIONNAIRE FOR AT201 IN STEP 3 (CONTINUED)				
You checked an **AGREED-UPON PROCEDURES** investigation in Section C above.	The AICPA places NO restrictions on the distribution of the report.		X	
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties, or when reporting on subject matter and written assertions were notprovided by the responsible party.		X	
	The report must be restricted to specified readers who agree to accept the specific tests performed.	X		
You checked a **CONSULTING SERVICES** engagement in Section C above.	The AICPA places NO restrictions on the distribution of the report.			
	The report can be generally distributed unless the criteria used are appropriate or available to only a limited number of parties, or when reporting on subject matter and written assertions were not provided by the responsible party.			
	The report must be restricted to specified readers who agree to accept the specific tests performed.			
Section F. General Standards: Within this specific professional standard, indicate if the standard requires CPA practitioner independence or special training		**Yes**	**No**	**Don't Know**
Is independence needed for this engagement?	There AICPA imposes no independence restrictions on the CPA practitioner for this engagement		X	
	The CPA practitioner must not do any other accounting or auditing services during this engagement		X	
	The CPA practitioner must not do any other consulting services for the client during the engagement		X	
	The CPA practitioner must maintain independence in mental attitude (be honest, impartial, unbiased)	X		
	The CPA practitioner must avoid conflicts of interest that would impair the practitioner's objectivity		X	
Is special training needed for this engagement? *	There are no requirements stated about competence, technical training, proficiency, or special knowledge		X	
	The CPA practitioner must possess adequate technical training, proficiency,and knowledge of the subject	X		
	The CPA practitioner must possess professional competence in the engagement being undertaken		X	
* HINT: In addition to this specific professional standard look at the WebTrust internet site identified earlier.				

The need for a responsible party is identical to AT101 because it was discussed in AT101 before it terminated further discussion of agreed-upon procedures engagements [AT101.11]. The general, fieldwork, and reporting standards are identical to AT101 as stated in AT201.05. Therefore, the independence and special training requirements are the same. Two differences stand out, as discussed below.

- ✓ **Report Type**. Students should observe that an agreed-upon procedures engagement is only allowed to report the specific tests performed and the specific findings. No opinion or negative assurances may be given [AT201.24 and .31]. This is inconsistent with the case as written and would negate the use of an agreed-upon procedures engagement for the purpose of obtaining a web assurance seal. The instructor should emphasize the point that AT201 does not allow the CPA practitioner to express an opinion or to give negative assurances.

- ✓ **Report Distribution**. The report is not a "general use" report. The report must be restricted for use by the specified parties who agreed to the procedures that would be applied [AT201.31].

Step 4: Communicating Your Findings to the Client

Students will vary in the wording of this step of the assignment. This component of the case should be evaluated for technical correctness, completeness, clarity, syntax, spelling, sentence structure, and other aspects of proper writing skills. The following key points should be made in a technically correct solution.

- **Addressee**. The correspondence should be addressed to Mr. Bill Miller of the firm E-commerce.com.

- **Paragraph One**. Students should briefly outline the three step process employed: (1) investigating website policies and different web assurance seals observed; (2) investigating the specific web seal programs and the requirements of merchants to obtain and renew the seals; and (3) investigating the AICPA professional guidance appropriate to such an engagement.

- **Paragraph Two**. Students should identify two web assurance seal programs, one of these should be the WebTrust program. Students should then recommend the WebTrust program as the single best seal that provides the most comprehensive e-commerce assurances. They should indicate that a CPA practitioner would be required to investigate and determine if the business meets all assurance criteria established by the WebTrust program.

- **Paragraph Three**. Students should indicate all of the following.

- ✓ The engagement would be governed by the standard AT101, Attest Engagements.

- ✓ An examination engagement would be needed in order for the CPA practitioner to express the needed opinion.

- ✓ Ms. Greene's firm will conduct the engagement and issue a report expressing an opinion about whether the firm has complied with all web seal requirements in all material respects over the period investigated. The criteria come from the WebTrust program.

- ✓ The report will not be restricted for distribution. It is a "general use" report.

- ✓ The management of the client is the "responsible party". They have provided the subject matter which in this case are the controls or evidence that demonstrates that they have satisfied the specific criteria of the WebTrust principles.

- ✓ Before undertaking the engagement, Ms. Greene's technical staff would have to attend special training in order to be technically competent to conduct the engagement. Specifically, they need to obtain the following additional skills: (1) a working knowledge of internet technologies, protocols and security techniques; (2) specific controls and best practices a company should implement; and (3) other skills as to be outlined soon in the WebTrust competency model. At this time the competency model has not yet been released, you will need to update subsequent to the release of this model.

- ✓ The only independence requirements for the CPA practitioner are those of independence in mental attitude regarding the specific attestation engagement. There should be no reason that Ms. Greene's firm could not perform other accounting, auditing, or consulting services for Mr. Miller, if he desired them.

- **Signatory**. The correspondence should be signed by Ms. Greene representing her CPA firm.

A SUBCONTRACTOR'S DILEMMA: READY FOR PRIME TIME?

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CASE DESCRIPTION

The case illustrates the difficulty of a small business strategy dependent upon government contracting. Based on field research of a "disadvantaged, small business enterprise" that has since failed, the business is examined at a pivotal stage in which initial success through the government's small business assistance programs has arrested and the entrepreneur must consider alternative directions for future growth. The case provides an introduction to government assistance programs for small businesses, especially for minorities and women under the Small Business Administration's 8(a) program, and is suitable for entrepreneurship and management courses in which small business strategy or government procurement content is introduced. The case has been successfully used for workshops in training of owners and managers of small business enterprises. Time commitment during class is recommended at 30-50 minutes if the case is read before class or 1-2 hours if the case is read, analyzed, and discussed in a workshop.

CASE SYNOPSIS

The Small Business Administration's 8(a) program was created in 1974 to assist minority and other disadvantaged small businesses to participate in Federal contracting through set-asides and preferential selection. If certified as an 8(a) firm, a small business can secure contracts from the government and from prime contractors with the government on a sole source, non-competitive basis. Hopeful of gaining government contracts and becoming certified as a "disadvantaged, small business enterprise," Smart Management Consultants (SMC) is in the developmental phase of 8(a) certification and finds the going tough. Government budgets have been cut and prime contractors seem to have already identified other small firms with which to subcontract. Unable to secure a continuing source of income as a small contractor, Richard Thomas, founder and partner in SMC must consider sticking with his original plan to build a contracting business in the transportation industry, move into new areas where his firm has less experience, or directly compete as a prime contractor against larger firms. While the names of the subjects and firms have been changed to *preserve their anonymity and to protect any proprietary information that may be published, the case is based on the experience of an entrepreneur as documented through field research and interviews. The case provides an overview of the various government procurement and contracting resources available to small and minority businesses, and provides a general overview of how government contracting works.*

INSTRUCTORS' NOTES

Recommendations for Teaching Approaches

The case has been used for undergraduate and graduate management courses in which government contracting is taught. The case may be approached either through in-class discussion or as a written assignment using the case questions.

To assist with the case discussion the authors provide the following analysis and suggestions for discussion.

SMC has had significant success in securing contracts, but these contracts are ending. Because of a recession there appears to be fewer opportunities for work and SMC's bids have not been successful, despite the company's efforts to take advantage of SBA programs, including the 8(a) program intended to assist disadvantaged, small businesses.

The instructor may entertain whether this situation is an issue of concern by asking: Is this only a temporary situation? This should lead to a discussion of the differences between a large and small business enterprise and the business cycle. A large firm may simply "ride out" a slow economy, but to a small firm even short-term declines in business activity can be catastrophic. Small businesses are financially much more sensitive to momentary business recessions because there is not much "slack" in resources for tightening costs and because owners are dependent upon the business as the primary source of income. The frustration of not securing a stream of contracts to keep the company afloat can precipitate the kind of search for a new strategy that we see expressed by Richard.

If the situation is critical, then is diversification a possible alternative to a narrow focus on project management contracting? A discussion of diversification strategies for small business should consider that diversification can be a way to build counter-cyclical income for a small business, but there are problems. The advantages of moving into other business areas are that diversification provides revenues for times when the primary business suffers and, in the longer term, can create new opportunities and directions for business. The disadvantages for a small firm, however, are serious. First, businesses are successful when they do what they do best. Richard clearly has the background and a track record in transportation and project management. The instructor might ask: "Do the skills at SMC translate to other areas? "Project management" is sufficiently broad a field that the answer is likely "yes," but the case facts fail to illuminate where this aptitude might be used and the demand for other possible applications would have to be assessed by SMC before moving into other areas. Given Richard's background it is not apparent that the firm has any special talent in other areas. Second, resources are scarce. SMC is two people: Richard and his partner. Any move into new terrain must dilute SMC's effort to build a reputation in the transportation industry.

Rather than diversify into new services, Richard should consider expanding into new geographical markets. Are there opportunities elsewhere? A check with FedBizOpps Web site should identify business potential elsewhere. Richard might also check with Small Business Administration offices in other regions. It is likely that the current downturn in transportation contracting is pervasive. Like most small businesses SMC's niche is the local, known market. When the known market is not growing, taking a risk on finding business elsewhere is a consideration. What are the chances that a prime contractor will extend assistance to a small business outside the local area? What is the likelihood of a successful bid on a project outside the company's geographic area of experience?

If students conclude that diversification into other service areas is an option, it should be pointed out that such a strategy should be pursued cautiously – even as an attempt to just keep the business going while pursuing new contracts in its primary area. The questions for Richard are: Are there available opportunities for which SMC is capable in other services or other areas, and has SMC exhausted the possibilities for business in the local transportation industry? The case suggests that the answer to this is that Richard is actively searching the contract databases cited in the case, but has not identified new business given SMC's capabilities.

Richard has raised the issue of moving from sub-contractor status to compete directly as a prime contractor. The discussion should consider the problems with prematurely competing as a prime contractor. Government contracts typically are awarded to companies with an established track record in managing large-scale projects. Examining current bid opportunities (RFP's) on the Internet, Richard might want to see if there are specific opportunities for minority/disadvantaged enterprises, even those for large scale projects. While SMC might have difficulty alone presenting itself as qualified, SMC could enter into joint ventures or other contracting arrangements with larger firms or with several small firms to meet the qualifications of the bid. A discussion of partnering to bid as prime contractor should lead to a discussion of the risks for a small business. While not a rare approach, there are often problems for small businesses managing the relationships among many partners on a bid, so this strategy should be taken with known business partners and with considerable legal and financial advice as to each partner's scope of work, responsibilities, coordination with the prime contractor, and payments.

The discussion should move to the issue: Is SMC ready to assume a prime contractor role? The discussion should consider that large-scale projects are not the only kind of opportunities for which SMC can be a prime contractor. Frequent checking of the Internet sites for current bid opportunities may identify special "set-aside" or reserved contracts for S/DBE's. Such contracts allow the small business enterprise to build up experience with contracting directly with the government to position the business for larger contracts. Given the recession, though, there may be fewer such opportunities. SMC's problem is that it has not yet graduated from the 8(a) program. It may not be viewed as "ready for prime time," especially given its brief history and failure to secure sufficient contracts to ensure viability.

The instructor might ask at this point: Why can't SMC go outside the routine of responding to published. RFP's? If SMC has not done so, it should directly market itself to federal and state purchasing agents in the areas that it does business. For Richard this would mean periodic personal contacts with state and federal purchasing agents in Virginia, including military bases. These contacts would be to simply introduce his company to continue to let those who make purchases and contracts know about SMC. Purchasing agents can be very helpful to small businesses and often prefer to include local businesses in contracting. Some agencies even set purchasing targets for this kind of contracting. Personal contacts with purchasing agents can inform Richard as to what prospects may be developing or create leads to opportunities he might not otherwise consider. While it is uncommon, such contacts can enhance SMC's chance of securing "sole source" contracts. Sole source contracts are purchases made by the government from a single business when the company has demonstrable experience in providing a unique kind of service.

To conclude the discussion, the topic of government programs to aid small business should be engaged, maybe by asking: Why are the government programs cited in the case less helpful to SMC than they should be? While 8(a) certification provides advantages, it does not by itself assure that large contractors will select a particular firm for set-asides. To position itself for inclusion with bids made by large contractors, Richard will need to continue to market SMC to these clients by making contact and exploring possible contributions. By searching the Internet for RFP's, Richard can identify projects and follow up with prospective bidders. Ideally, building a longer-term association with a major contractor would be an objective. The instructor should invite speculation on the question: What is the likelihood that SMC can be successful in this approach?

Richard expressed frustration over changes in the way that government contracting is performed. Students likely will have a lively debate over the issue: Should government contracting serve the need to lower government's costs, especially in a time of an economic downturn, or should government provide more help to disadvantaged and minority businesses in times of recession? The case does not directly provide insight into this issue, but it does document the problems of a small firm surviving a recession. The instructor may want to list on the board the "pros" and "cons" of special attention to this class of entrepreneurial enterprise and let the arguments speak for themselves rather than offering closure on the debate.

To conclude the discussion, the instructor may ask "Should SMC exit? Shouldn't markets pick winners and losers?" Exit strategies are always an option and prior investments are sunk costs. While some will see that this is a business that is beginning to develop a reputable track record that should realize future returns, other students may point to the difficulties of maintaining a small business for a long period of time without income when it is the family livelihood. Once students have contributed to this discussion, the instructor can conclude the case with the remark that in early 2004 SMC ceased operation and became a failed small business enterprise. Richard and his partner were last known to be job-hunting and exploring other prospects for a business.

CASE QUESTIONS

1. What special problems do new start-up businesses have that can be assisted by the various programs mentioned in the case?

Depending on the class and students, this question should generate lively discussion. Again, depending on context, the discussion can be moved to a broader consideration of government policy and responsibility to small businesses.

New businesses have no track record to attract clients. SBA programs offset this deficiency through a certification process that establishes that the firm has met certain standards as a viable concern. Small firms lack resources of established, large firms to compete for projects and lack resources to execute them. By identifying certain contracts for S/DBE's and by requiring large firms as prime contractor to include S/DBE's in a specified percentage of the total contract, SBA programs guarantee that some small businesses will secure contracts. However, prime contractors tend to identify favored, small businesses to develop a sub-contracting relationship. This is an obstacle to new entrants trying to gain experience.

2. Are the problems of the "disadvantaged" minorities and women different from most small businesses? How do the programs mentioned in the case address these problems?

As in question 1, the instructor may want to consider context of the case presentation to move the discussion broadly to assess obstacles and the role of government policies.

These are historically underrepresented groups in business. There may be structural obstacles that limit their participation, such as prejudice, limited interaction with government and business contacts, and lack of information. The 8(a) program specifically addresses key issues to empower disadvantaged and minority firms to compete. Though a business's performance over the long term must be the criterion for business success, SBA programs provide early assistance through education and the 8(a) program permits a firm to compete for set-aside projects, and even gain advantageous consideration when bidding for government work.

3. The business economy is cyclical. During growth stages entrepreneurial businesses prosper, but during a downturn small businesses are vulnerable to a decline in demand. To what extent is Richard's problem simply attributable to the business cycle? What advice would you provide to a small business trying to ride out the effects of a downturn in the economy?

The case cites the economic downturn as a contributing factor to SMC's problems. Assuming that the economy is in recession or that this industry only is in recession, as a small business SMC will be disadvantaged in a competitive market. A small business lacks the financial "slack" to be able to absorb the impact of tough times. In a two man business there is no labor force to lay off. To the owner of a small business all costs seem to be "fixed" rather than "variable." Business costs are primarily those of running an office and marketing for new business. There are few avenues for "belt tightening" to weather the duration in which the economy might turn around. Many small businesses do fail during recession. While an exit strategy should be considered if a turn around in the economy does not seem imminent, survival depends on continued efforts to secure new business. Opportunities in the current market do not appear to favor a more aggressive approach. Diversification into other businesses or other geographical areas might be successful, if SMC can afford an aggressive posture to keep the office open and continue efforts to market the company. Richard could consider a "hibernation" strategy in which SMC is simply "put on hold" until the economy improves. In the meantime Richard might pursue gainful employment elsewhere to ensure that his personal financial and family obligations are satisfied.

Whatever advice is given to Richard, it should be made clear that there are no easy solutions to his situation. The tendency is to calculate that prior investment in the business locks the entrepreneur into future investment. This is the fallacy of "sunk costs." Whatever effort, time, and money have been invested in securing the growth of SMC are historical and spent. The question now is: If Richard continues to invest his resources in SMC will it turn around? This commitment which concerns the future has to be made now. The immediate future does not look promising. Whatever the decision, it should be based on an assessment of future prospects, not past investment.

4. What are the advantages of large firms over small firms? What do you think of the concerns expressed by Richard and other small subcontractors in the concluding paragraph about the relationship between primes and subcontractors?

While we can observe that every business listed in the <u>Fortune 500</u> began as a small business, it is also evident that there is persistence in this listing of large firms. The same firms tend to be listed each year although a firm's relative ranking in the annual listings may change over time. Large businesses persist. Small firms are vulnerable. We have discussed some of the reasons for this. Small businesses lack experience and have fewer resources. Large firms can lay employees off during tough times to cut costs. Large firms can spread costs and risks over more income producing sources to lower prices on high value projects. Large firms tend to have reputations built up over years of being in a business. As government contractors, large firms have executed the kind of work the government desires and, except in limited areas in which the company has no expertise, has no need for sharing a contract with another company.

Students should pick up on the possible tenuous relationship between large contractors and S/DBE's as subcontractors. The discussion should examine the issue both from the large contractor's viewpoint and from the perspective of the S/DBE.

Richard's comment shows frustration in working with larger established contractors. Larger contractors in many projects do need to satisfy government requirement to include S/DBE's. Intended to increase the prospects for small businesses, it also has the potential for some large contractors to view the S/DBE as superfluous, as limiting the prime's ability to select the "right" subcontractor, or, worse, as a potential future rival.

Under what kinds of relationships could enmity be reduced? Consider relationships in which the S/DBE offers services that the prime ordinarily would not offer. Would excellent performance by the S/DBE mitigate this attitude? How does poor performance by S/DBE subcontractors influence this perception?

5. Assess SMC's options: Should Richard continue to pursue contracts as he has done? Change strategy to move into other areas? Strike out to compete as a prime contractor? Why?

The analysis sections above explore many of the options. Diversifying into related areas of project management is an option, but while in the developmental phase, SMC ought to continue to pursue the kinds of jobs for which it is best suited and has a track record. A possibility that was dismissed by Richard for financial reasons was a decision to move into another geographical market. This will require some research into what areas might be productive. Research using the FedBizOpps Web site would help to identify opportunities. The limitation is that SMC would be moving into an area where it has less experience. This would require greater marketing efforts to government agencies, prime contractors, and private businesses located in unfamiliar geographical areas.

SMC's strength is that it has successfully competed and has completed work on a number of contracts. It is capable of performing. SMC also has weaknesses that ought to be listed. These include limitations of personal and in-house expertise, narrow expertise in construction engineering and in geography, and few resources to sustain an aggressive posture. Opportunities do not look promising. Threats from recession and competition narrow the strategy possibilities.

6. If you were a member of the ETTAP team what would you advise SMC as to its next step?

Marketing through personal contacts is time consuming. Richard may be able to manage this now as business is in a hiatus, but he also might want to consider finding someone with contacts in the industry to help him with this task. Located in the Richmond area, he has a potential service area from Hampton Roads to Washington, DC, that is rich in opportunity for government contracting. Developing a list of potential clients for continuous follow-up would be a start. He also should continue to monitor RFP's and identify potential prime bidders to establish a bidding relationship.

Business consultants like to have concrete, positive solutions to business problems. The reality is that this is not always possible, and clients need to have a realistic understanding of their situation. Richard needs to set a realistic limit on how much time and expense SMC can afford to find new contracting opportunities. Small businesses do fail and consideration of an exit strategy will be helpful to mitigate losses should no opportunity develop within the time frame allowed.

CREATE-A-CANDLE, INC.: A CONCEPTUAL APPROACH TO FINANCING FEEDBACK

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Newell D. Wright, James Madison University

CASE DESCRIPTION

The primary focus of this case concerns the borrowing needs of a start-up business, taking into account the financing feedback associated with interest expense. Instead of using the traditional iterative method for debt determination, enough information is provided so the better students could express the relationship in an algebraic construct and solve directly for the requisite loan amount. Secondary issues include developing a forecasted statement for the first year of a start-up business. The case has a difficulty level of three, and is positioned for use in junior level principles of finance courses as well as in integrated business curriculum classes for juniors. The case is designed to be taught in two class hours and is expected to require three to six hours of outside preparation by students.

CASE SYNOPSIS

Bob Fortune has spent a number of years in the candle-making industry and has decided to start his own business. Using a made-to-order approach, he is hoping to carve out a niche in the market. He has obtained $260,000 in equity investment for his business but still needs additional funds and plans to use a line of credit. To determine the amount he needs to borrow, Bob needs to develop his first year financials. Not only does he need to completely forecast his income statement and balance sheet, he also needs to determine the amount of debt financing needed to reach his target cash balance. Deriving the amount of financing needed is complicated by the financing feedback effect, wherein the more he borrows, the more interest he pays.

INSTRUCTORS' NOTES

Learning Objectives

After successful completion of this case, students will:

- create a forecast for the first year of a start-up business
- describe the impact of financing feedback on financial statements for an S-Corporation and C-Corporation
- solve for the ending debt balance of an S-Corporation which takes into account the financing feedback associated with interest expense on new debt borrowing
- solve for the ending debt balance of an C-Corporation which takes into account the financing feedback associated with the tax deductibility of interest expense on new debt borrowing

Theoretical Frameworks

To successfully analyze this case, students must be familiar with:

- *Accounting concepts and terminology*. Students must understand basic accounting concepts (e.g. depreciation, cost of goods sold, accounts receivable, etc.) and terminology used to present the assumptions.

- *Financial forecasting assumptions*. This case provides students with enough information to construct financial statements (income statement and balance sheet) for a 1-year period. Students will need to take information presented in the text and in exhibits and convert this information into financial statement information.

- *Financial forecasting methods.* Students must understand the basics of forecasting financial statements (transaction-based) and the interrelationship between the income statement and balance sheet.

- *Financing feedback.* Students should be aware of the debt/interest loop encountered when forecasting financial statements. They should understand the meaning of financing feedback as it relates to new debt borrowing.

ANCILLARY READINGS

Financial forecasting assumptions. A realistic and comprehensive financial planning example is provided in:

Lasher, William R. (2005). *Practical Financial Planning*, Fourth Edition. United States: Thomson Southwestern, 636-646.

Financial forecasting methods. An example of the transactions-based approach, presented as an accounting equation is in:

Needles, Belverd, et al, (2002). *Principles of Accounting*, United States: Houghton-Mifflin, 16-23.

Financing feedback. The iterative technique for solving for debt given financing feedback is presented in:

Brigham, Eugene & L.C. Gapenski. (1997). *Financial Management: Theory and Practice*, Eighth Edition United States: Dryden Press, 536-543.

SUGGESTIONS FOR EFFECTIVELY TEACHING THIS CASE

This case has been "test marketed" in two sections of a principles of finance course. Each section had approximately 80 students. We suggest that student teams be divided into groups of five or six students, and each group be provided with a copy of the case at least 2 days prior to attending class. Student should come to class with a completed income statement and balance sheet assuming no debt is issued (for an S-Corp with no debt, EBIT is equivalent to net profit). Note that the correct ending cash balance will be negative, so the student may think of debt financing as the amount needed to both remove the negative balance and then to achieve the desired target. The students should have also thought about the impact of financing feedback and should have attempted to develop an equation that represents the relationship between the amount borrowed and the amount of cash after paying interest expense.

Two methods may be used to create a forecast - determining each account independently or representing each transaction using either the financial identity (see the answer key) or T-accounts. We prefer the transactions approach since it presents the context for the operations of the firm. We suggest allowing approximately 30 minutes of class time for students to ask questions regarding creating balances. At the end of the question and answer session, we suggest that a handout be provided of the correct estimates needed to forecast debt requirements. A class discussion should be undertaken addressing the debt/interest loop and financing feedback. Each group should brainstorm how debt could be solved for in the context of an S-corporation that would address the financing feedback associated with new debt borrowing required. The group should be pulled together and suggestions should be gathered from each group. This will work well and should lead to discussions as to what financing feedback is and why the debt/interest loop exists. The algebraic equation that closes the debt/interest loop should be shared with the students. The class should walk through how to solve for the amount of new debt financing needed that takes into account financing feedback. The statements should be completed with the new debt financing required.

The students should be asked to brainstorm in their groups how to solve for the ending debt balance needed if the company was a C-corporation. This would require the student teams to take taxes think of how taxes would impact financing feedback. They should develop the changes necessary to the algebraic equation that would adjust for taxes. Allow the students to resolve for the new ending debt balance that includes the tax deductibility of interest impacts. The statements should be completed with the new debt financing required.

ASSIGNED QUESTIONS

1. What is projected for operating income (EBIT) for 2005?

2005 Operating Income	
Revenues	$ 463,320
- COGS	(221,619)
Gross Margin	241,701
- SG&A Expenses	(310,400)
- Depreciation Exp. (Retrofit)	(21,000)
- Depreciation Exp (Office Equip.)	(17,000)
EBIT	(106,699)

Students will be required to find the information in the case that is necessary to calculate operating income.

"A" students will be able to correctly determine EBIT. If a problem does occur, it is likely to concern confusion over depreciation being incorporated into inventory and then "expensed" though COGS.

"B" and "C" students will be able to derive SGA and depreciation expense correctly, but have problems in determining COGS. Also, some may represent PP&E purchases as expenses.

2. Calculate the financial statements with the assumptions provided. Do not consider the borrowing needed to meet the target ending cash balance of $52,000. (Note: Cash will be negative without additional borrowing)

We used the following transaction-based method for forecasting total assets:

	Cash	AR	Inv	NFA		AP	Accruals	Debt	CS	RE
Beg. Balance 12/31/04	-	-	-	-		-	-	-	-	-
Pay AP										
Pay Accruals										
Collect AR's										
Initial Inventory	(10,000)		10,000							
Buy Manufacturing Equipment	(183,000)			183,000						
Buy Office Equipment	(85,000)			85,000						
Building Retrofit	(105,000)			105,000						
Production: Materials Purchases			113,050			113,050				
Production: Labor			71,969				71,969			
Production: Depreciation			36,600	(36,600)						
Payments for AP's	(94,208)					(94,208)				
Payments for Labor	(69,201)						(69,201)			
Revenues	459,459	3,861								463,320
COGS			(221,619)							(221,619)
SG&A Expenses	(310,400)									(310,400)
Depreciation Exp. (Building)				(21,000)						(21,000)
Depreciation Exp (Office Equip.)				(17,000)						(17,000)
Interest	-									-
Taxes										-
Dividends										-
Line of Credit Borrowing										
Owners Investment	60,000								60,000	
Outside Equity Investment	200,000								200,000	
Ending B/S 12/31/05	(137,350)	3,861	10,000	298,400		18,842	2,768	-	260,000	(106,699)
			Total Assets	174,911					Total Liab. & Equity	174,911

"A" students will be able to correctly complete the financial statements, with some relatively minor errors in the determination of cash and/or retained earnings. The balance sheet will balance.

"B" and "C" students will be able to correctly determine 4 of the 6 "simpler" accounts (not Cash or RE). Cash and RE will have most of the transactions correctly represented but some major errors will appear in both accounts.

3. How does the projected ending cash balance differ from the target cash balance?

Forecasted Ending Cash	(137,350)	
Target Ending Cash Balance	52,000	
Total Cash Needed	189,350	(Target Ending Cash - Forecasted Ending Cash)

Almost all students will be able to address this question, since it involves finding the difference between the cash balance in the forecast and the target cash balance. The purpose of this question is to have the student to consider the meaning of a negative cash balance in the forecast and the relatively simple math needed to reach the target.

4. Explain the debt/interest loop issue and financing feedback impacts on the financial statements.

The debt/interest loop occurs when taking into account the new debt financing needed in balancing financial statements. Without knowing the borrowing required, interest expense cannot be calculated. Therefore, the income statement cannot be completed. Without a complete income statement, retained earnings cannot be computed. From a cash standpoint, the target ending cash balance cannot be achieved without knowing specifically the amount of debt financing required to create that balance. Therefore, the debt/interest loop prevents the completion of the financial statements.

Most textbook methods use an iterative approach to finding the debt required to balance the statements. We found this technique time consuming and inaccurate. Unfortunately with the iterative methods, students are required to plug in various debt levels and work towards the amount of debt required. At some point the statements are "close enough" and the statements are plugged to balance. Our method allows the student to solve algebraically for the level of new debt required and will balance the statements on the firm attempt.

"A" students will be able to identify the circularity: that the amount of cash you need to raise determines the amount you need to borrow; but the amount you need to borrow requires an interest payment, which increases the amount of debt you need to raise. These students will also be able to relate the interest payment to its impact on retained earnings and retained earnings to its impact on the firm's financing.

"B" and "C" students will be able to identify the circularity but not be able to relate the circularity to the financial statements.

5. Based on question #3, you have a specified shortfall of cash. Create an equation that represents how much you need to borrow to achieve the desired cash balance after taking into account the interest expense (financing feedback).

$$\text{Borrowing Needed} = \frac{\text{(Target Ending Cash - Forecasted Cash)}}{\text{(1- Interest Rate)}}$$

"A" students will be able to identify the variables and express the variables within an equation context. Only a minority, however, will determine the correct equation.

"B" students will recognize that the amount borrowed will need to be greater than the amount of cash received. However, these students will not completely identify the relevant variables.

6. **[To be addressed in class] Specifically, how much debt will it take to balance the balance sheet for this S-corporation, including the impact of interest expense? How much debt does Bob need to meet the target ending cash balance?**

Upon the in-class presentation, first time through:

"A" students will be able to follow the presentation and clearly determine how this approach works.

"B" and "C" students will be able to identify what they don't understand. After asking questions, the majority will understand how to implement the algebraic approach to determining the required amount of financing.

To calculate the debt required, the students will need to compare the projected ending cash balance with the target ending cash balance. They will then need to borrow enough money to meet the target ending cash balance and to take into account the interest expense associated with borrowing.

$$\text{New Debt Needed} = \frac{\text{(Target Ending Cash Balance - Forecasted Ending Cash Balance)}}{\text{(1 - Interest Rate on Debt)}}$$

New Debt Financing Needed		
Forecasting Ending Cash	(137,350)	
Target Ending Cash Balance	52,000	
Total Cash Required	189,350	(Target Ending Cash - Forecasted Ending Cash)
Interest Rate on Line of Credit	5.0%	
New Financing Required	199,316	(Target Ending Cash - Forecasted Ending Cash)/(1 - Interest Rate)

Here is the final solution taking into account the new borrowing for the S-Corporation:

Income Statement 2005

Revenues	$ 463,320
- COGS	(221,619)
Gross Margin	241,701
- SG&A Expenses	(310,400)
- Depreciation Exp. (Retrofit)	(21,000)
- Depreciation Exp (Office Equip.)	(17,000)
EBIT	(106,699)
-Interest	(9,966)
EBT	(116,665)
-Taxes	-
EAT	(116,665)
Dividends	-
Change in Retained Earnings	(116,665)

Financial Identity

	Cash	AR	Inv	NFA		AP	Accruals	Debt	CS	RE
Beg. Balance 12/31/04	-	-	-	-		-	-	-	-	-
Pay AP										
Pay Accruals										
Collect AR's										
Initial Inventory	(10,000)		10,000							
Buy Manufacturing Equipment	(183,000)			183,000						
Buy Office Equipment	(85,000)			85,000						
Building Retrofit	(105,000)			105,000						
Production: Materials Purchases			113,050			113,050				
Production: Labor			71,969				71,969			
Production: Depreciation			36,600	(36,600)						
Payments for AP's	(94,208)					(94,208)				
Payments for Labor	(69,201)						(69,201)			
Revenues	459,459	3,861								463,320
COGS			(221,619)							(221,619)
SG&A Expenses	(310,400)									(310,400)
Depreciation Exp. (Building)				(21,000)						(21,000)
Depreciation Exp (Office Equip.)				(17,000)						(17,000)
Interest	(9,966)									(9,966)
Taxes										-
Dividends										-
Line of Credit Borrowing	199,316							199,316		
Owners Investment	60,000								60,000	
Outside Equity Investment	200,000								200,000	
Ending B/S 12/31/04	52,000	3,861	10,000	298,400		18,842	2,768	199,316	260,000	(116,665)

Total Assets 364,261　　Total Liab. & Equity 364,261

7. **[To be addressed in class] If the company were a C-corporation with a tax rate of 40%, how much at a minimum would Bob need in a line of credit to meet the target ending cash balance? Include the impact of the tax deductibility of interest.**

"A" students will find this to be a relatively easy transition.

"B" and "C" students that did not fully understand the treatment with an S-corporation will often begin to understand the approach since the transition from an S-Corporation to a C-Corporation is relatively simple and serves primarily as a review.

The first step is to reforecast the income statement and balance sheet taking into account taxes. Note that due to a loss, there is a tax credit that is treated as a cash inflow and not accrued.

Income Statement 2005

Revenues	$ 463,320
- COGS	(221,619)
Gross Margin	241,701
- SG&A Expenses	(310,400)
- Depreciation Exp. (Retrofit)	(21,000)
- Depreciation Exp (Office Equip.)	(17,000)
EBIT	(106,699)
-Interest	-
EBT	(106,699)
-Taxes	42,680
EAT	(64,019)
Dividends	-
Change in Retained Earnings	(64,019)

Financial Identity

	Cash	AR	Inv	NFA		AP	Accruals	Debt	CS	RE
Beg. Balance 12/31/04	-	-	-	-		-	-	-	-	-
Pay AP										
Pay Accruals										
Collect AR's										
Initial Inventory	(10,000)		10,000							
Buy Manufacturing Equipment	(183,000)			183,000						
Buy Office Equipment	(85,000)			85,000						
Building Retrofit	(105,000)			105,000						
Production: Materials Purchases			113,050			113,050				
Production: Labor			71,969				71,969			
Production: Depreciation			36,600	(36,600)						
Payments for AP's	(94,208)					(94,208)				
Payments for Labor	(69,201)						(69,201)			
Revenues	459,459	3,861								463,320
COGS			(221,619)							(221,619)
SG&A Expenses	(310,400)									(310,400)
Depreciation Exp. (Building)				(21,000)						(21,000)
Depreciation Exp (Office Equip.)				(17,000)						(17,000)
Interest	-									-
Taxes	42,680									42,680
Dividends										-
Line of Credit Borrowing	-							-		
Owners Investment	60,000								60,000	
Outside Equity Investment	200,000								200,000	
Ending B/S 12/31/05	(94,671)	3,861	10,000	298,400		18,842	2,768	-	260,000	(64,019)

Total Assets 217,590 Total Liab. & Equity 217,590

To calculate the debt required, the students will need to once again compare the projected ending cash balance with the target ending cash balance. They will then need to borrow enough money to meet the target ending cash balance and to take into account the tax deductibility of interest expense associated with borrowing. The equation needs to be adjusted such that the after-tax rate of interest is used.

$$\text{New Debt Needed} = \frac{\text{(Target Ending Cash Balance - Forecasted Ending Cash Balance)}}{\text{(1 - (Interest Rate on Debt(1-Tax Rate))}}$$

New Debt Financing Needed		
Forecasting Ending Cash	52,000	
Target Ending Cash Balance	52,000	
Total Cash Required	146,671	(Target Ending Cash - Forecasted Ending Cash)
Interest Rate on Line of Credit	5.0%	
Tax Rate	40.0%	
New Financing Required	151,207	(Target Ending Cash - Forecasted Ending Cash)/ (1 - (Interest Rate(1-Tax Rate))

Here is the solution for a C-Corporation:

Income Statement 2005

Revenues	$ 463,320
- COGS	(221,619)
Gross Margin	241,701
- SG&A Expenses	(310,400)
- Depreciation Exp. (Retrofit)	(21,000)
- Depreciation Exp (Office Equip.)	(17,000)
EBIT	(106,699)
-Interest	(7,560)
EBT	(114,259)
-Taxes	45,704
EAT	(68,556)
Dividends	-
Change in Retained Earnings	(68,556)

Financial Identity

	Cash	AR	Inv	NFA		AP	Accruals	Debt	CS	RE
Beg. Balance 12/31/04	-	-	-	-		-	-	-	-	-
Pay AP										
Pay Accruals										
Collect AR's										
Initial Inventory	(10,000)		10,000							
Buy Manufacturing Equipment	(183,000)			183,000						
Buy Office Equipment	(85,000)			85,000						
Building Retrofit	(105,000)			105,000						
Production: Materials Purch.			113,050			113,050				
Production: Labor			71,969				71,969			
Production: Depreciation			36,600	(36,600)						
Payments for AP's	(94,208)					(94,208)				
Payments for Labor	(69,201)						(69,201)			
Revenues	459,459	3,861								463,320
COGS			(221,619)							(221,619)
SG&A Expenses	(310,400)									(310,400)
Depreciation Exp. (Building)				(21,000)						(21,000)
Depreciation Exp (Office Equip.)				(17,000)						(17,000)
Interest	(7,560)									(7,560)
Taxes	45,704									45,704
Dividends										-
Line of Credit Borrowing	151,207							151,207		
Owners Investment	60,000								60,000	
Outside Equity Investment	200,000								200,000	
Ending B/S 12/31/05	52,000	3,861	10,000	298,400		18,842	2,768	151,207	260,000	(68,556)

Total Assets 364,261 Total Liab. & Equity 364,261

THE MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

David K. Smith, Jr., Southeast Missouri State University

CASE OVERVIEW

This case challenges students to consider how David Seamon (newly-appointed Director for Business Development & Trade of the Missouri Department of Economic Development) can double (within three years) the annual number of firms from elsewhere in the United States and/or overseas who actively consider the State of Missouri as a place to open a new factory or a new office. From a measurement perspective, the case indicates that any firm making a written and/or electronic (web-based, telephone, etc.) inquiry to the Missouri Department of Economic Development will be counted as having "actively considered" the State of Missouri as a potential new location. The case is based on discussions conducted by the author with David Seamon. The case is appropriate for senior-level undergraduates as well as students in MBA and Executive Development programs. It is designed to be taught in a class session of 1.5 hours, and is likely to require a couple of hours of preparation by students.

CASE SYNOPSIS

This case can be used to stimulate discussion on at least four interesting and important issues: (1) How can managers grow and/or turnaround a business or an organization which is not doing well; (2) Are the same models and/or conceptual frameworks and/or data analysis tools which would be applied to this situation within a private sector (that is, business) context useful within the public sector context as well; (3) What sort of efforts are public sector entities (for example, states, regions, and/or countries) making to promote their economic growth and development; and (4) Will the model or conceptual framework or data analysis tool utilized by the analyst affect the data on which decision makers focus their attention and/or the alternatives they are likely to consider? Data in the case include: (1) Description of the challenge faced by David Seamon; (2) Descriptive information on the Missouri Department of Economic Development and its various units; and (3) Recent statistics indicating the number of contacts, the in-bound investments, and the trade investments generated by each of the State of Missouri's overseas trade development offices. The costs of operating each office are also provided.

INSTRUCTORS' NOTE

As indicated in the case, David Seamon (newly-appointed Director for the Missouri Department of Economic Development's Division of Business Development & Trade) faces the following situation:

1. Inbound investment of venture capital into Missouri has fallen from $766,000,000 in 2000 to $169,500,000 in 2002.
2, Kevin Simmons, Director of the Missouri Department of Economic Development, has challenged Seamon to double (within three years) the annual number of firms which "actively consider" the State of Missouri as a place to open a new factory or a new office. For purposes of this challenge, Simmons indicates that any firm which makes a written and/or electronic (web-based, telephone, etc.) new factory and/or new office-related inquiry to the Missouri Department of Economic Development will be considered to have met the criteria of "actively considering" the State of Missouri.

As regards lessons and/or information which students should learn from this case, at least four points can be made:

1. At the beginning of the case, students will need to consider the extent to which models and conceptual frameworks developed in the private (i.e., business) sector can be useful to public sector executives. By the end of the case discussion, they are likely to have concluded that in some situations, private sector conceptual frameworks and/or decision tools can be very relevant and useful to public sector managers.
2. Students will need to consider how to turnaround a business and/or organization which is not performing well. During the discussion of the case, students will discover that they have used different approaches to the problem; at this point, they should also discover that the model and/or conceptual framework and/or data analysis tool they use is very likely to impact upon the data and/or alternatives which they consider.
3. Students will be able to compare their solution to one developed by a Spring Semester 2004 MBA class at Southeast Missouri State University; they will also have the opportunity to hear the reaction of David Seamon to the solution proposed by the MBA class.
4. As they work through the case, students will be exposed not only to the challenge faced by David Seamon but also to a bit of information about the State of Missouri's

Department of Economic Development and the tools it uses to stimulate economic growth and development.

DISCUSSION QUESTIONS

I often select one student to lead the discussion. Another approach would be to solicit input from various students at various stages of the analysis. Either way, my usual approach to this case is threefold:

1. STEP #1. Solicit from many students the details of the situation faced by David Seamon. As it happens, this short case does not include a lot of information. Usually, I write much of the information which students do come up with on the board, so that if questions on "facts of the case" arise, we will have that information in front of us.
2. STEP #2. Ask an individual student or the class as a whole to address a very specific series of questions. Those questions, and comments relating to two possible solutions to the case, are as listed below:

1) What is the main problem?

Students usually conclude that David Seamon must develop a plan to double (within three years) the number of written and/or electronic inquiries received by the Missouri Department of Economic Development from companies located in other states and/or overseas.

2) What kind of problem is this?

Instructors should not be surprised if there are as many answers to this question as there are students in the class. Clearly, there is no one "right" answer. However, two alternative approaches, each of which seems quite relevant to the situation, are as indicated below:

1. Growing a business.
2. Turnaround strategy.

3) For this kind of problem, what are the key variables which decision-makers must consider, and who is the expert who says so?

For students concluding that the main problem is the need to "grow the business," Ansoff (1957) indicates that there are four (and only four) options: (1) Market penetration; (2) Market development; (3) Product development; and (4) Diversification.

Students concluding that the main problem is the need to develop a "turnaround strategy" may find useful a model by Sheth (1985), which identifies nine alternatives which the author believes should be considered: (1) Entrenchment; (2) Sell to intermediaries; (3) Mandatory consumption; (4) Go international; (5) Broaden the product line; (6) New situations; (7) New applications; (8) Repositioning; and (9) Remarketing.

4) What data from the case relate to the key variables?

As implied above (and this is one of the key learning points of the case), the data students present will depend on the main problem they identify. Students believing the main problem relates to the need to "grow the business" will focus on the four options identified by Ansoff (1957); Appendix 1 provides descriptions of each alternative and identifies data from the case which relate to each of them. For students believing the main problem is turnaround strategy-related, Appendix 2 provides definitions of each alternative and then identifies data from the case which relate to them

5) What alternative solutions can be identified?

Because research suggests we make better decisions if we identify alternatives and then chose one, I require students to identify at least two alternatives. Of course, students having difficulties coming up with a second alternative can be reminded that one possible solution is to "change nothing."

6) Which one alternative does the class/student recommend, and why?

"Changing nothing" is not an option for David Seamon, if he wishes to achieve his objective, that is, to double (within three years) the annual number of inquiries received by the State of Missouri from companies outside of Missouri and/or overseas. Students believing the main problem involves the need to "grow the business" will need to present an analysis which touches on each of the growth options identified by Ansoff (1957) . Students believing that the main problem involves the need to create a "turnaround strategy" will need to present an analysis which touches on each of the turnaround strategy options suggested by Sheth (1985).

In the discussion and analysis of this case conducted by the MBA students in the Spring Semester 2004 session of BA651 (Strategic Marketing Management), students chose to focus intensively on the turnaround strategy alternative. For additional information on what happened, please see the epilogue.

7) What negatives are associated with the alternative selected by the class leader and/or other members of the class?

Very few solutions are risk and/or problem-free. Negatives associated with the solution proposed by the class leader and/or other members of the class could include the following: (1) The chosen alternative, if it requires the Missouri Department of Economic Development to develop specialized equipment and/or skills which the organization doesn't currently possess, could be expensive both in terms of time and money. Also, because the case probably doesn't provide all the data a decision-maker would need (in other words, it is likely that some important data is missing), it is possible that assumptions made by the class leader regarding the actual situation faced by the Missouri Department of Economic Development are incorrect. If so, the proposed solution might be inappropriate.

3. STEP #3. Consider (at least briefly) the "take-aways" for the case. That is, of all the different points and issues discussed, what are the two or three issues most-worth remembering.

EPILOGUE(1)

In their comments for David Seamon, students presented arguments which focused on the turnaround strategy options suggested by Sheth (1985). Specific suggestions made by the students included:

1. *Entrenchment*: The Missouri DED website tells us that the State of Missouri has targeted three industry segments for special interest, attention, and efforts: (1) Plant and life sciences; (2) Information Technology (IT); and (3) Advanced manufacturing. For each of these targeted segments, students suggest that DED staff should identify key firms and/or trade associations, identify key decision makers in these firms and/or organizations, identify the processes they use to make investment decisions, the criteria they use to choose the locations where they are making those investments, etc. Also, DED staff should identify locations in the world where these companies are making investments, and then check to see what sort of incentives (financial or otherwise) those locations are providing to companies in these targeted segments. The point is that if the State of Missouri wants to attract investments from companies in these segments, it needs to be exceptionally knowledgeable regarding not only the individuals who are making the investment decisions and the decision processes used by companies in these segments, but also the decision criteria (including incentives targeted companies are being offered by locations elsewhere

in the world) used by these key decision-makers. At the end of the day, to attract investments from players in these targeted industries (or any other industries, for that matter), Missouri needs to be perceived as offering good value for money on characteristics which are important to key decision makers in that industry, and compared to the value for money offered by other locations in the world. Please note: Once DED is certain that it has correctly identified criteria which are especially important to key decision makers in these targeted industries, it might be able to use to good advantage the ideas of permission marketing popularized by Godin (1999), either through direct marketing (buy lists of individuals and/or companies) or using the internet.

Regarding heavy users, students suggest that DED should take a look at the industries (both domestic and overseas) which have been making heavy investments in new factories and/or offices over the last several years. Once it is clear which industries in the world have been heavily engaged (over the last couple of years) in making inbound-investment related activities, it should be possible (through discussions with companies and/or trade associations) to sort out both where in the world these companies are making investments and why. Once DED has this information, it should be possible to use that information to assess the likely attractiveness of Missouri to these heavy-user (that is, heavy inbound investments over the last several years) industries. If the State of Missouri turns out to look highly attractive compared to the decision criteria of one or more heavy-investment industries, DED may wish to consider adding that industry to the list of those identified by the State as targeted industries.

Regarding heavy users, students also suggest that DED should take an intensive look the industry affiliations of companies (domestic or international) which have opened new factories and/or offices in the State of Missouri over the last several years. Perhaps there are industries for which Missouri-based firms do in fact benefit from defensible competitive advantages, whether natural resource-related, location-related, or human capital-related. If so, these advantages should be promoted to other firms in those industries, and/or firms which have moved here recently (note: could also include firms which have been here a long time, too) should be encouraged (incentivized?) to expand their operations here.

Regarding the use of multiple channels, students suggest that DED might be able to benefit importantly by using the sort of permission-style marketing described by Godin (1999). Additional elaboration on this idea can be found in the "New Applications" section of this note. Also, one student suggested that DED should link up with international students studying in Missouri (perhaps stage a one-day "International Student Day" event for them in Jefferson City), provide them with information about both trade and investment-related opportunities with Missouri companies, and then urge these students to communicate this information to relatives and/or business associates in their home country. Another student suggested that civic leaders of cities and/or towns in which overseas and/or domestic firms have located factories and/or offices should meet with the managers of those firms and solicit input from those managers on how to attract additional firms to their area and/or how to motivate (incentivize?) existing firms to expand their operations; these suggestions could then be used locally and/or forwarded to DED. This particular student also suggested that the State of Missouri should have a program so that if a town or city discovers that a small piece of missing infrastructure (for example, a rail spur) is preventing investments by overseas and/or domestic firms, that city or town could apply for funding, construct the missing infrastructure, and then repay the funds over a period of time, from its increased tax revenues.

2. Regarding intermediaries, students suggest that DED may wish to consider two specific initiatives:
    a. Regarding the targeted industries (and, for that matter, other industries as well), there may be key suppliers and/or key customers already located here in Missouri or willing to consider establishing facilities here in Missouri. Assuming so, one might be able to attract firms in the targeted industries and/or other desirable investors here to Missouri because key suppliers and/or customers and/or partners of other kinds are already located here. Of course, even for non-targeted industries, if that industry already has key suppliers and/or customers and/or other partners operating here in Missouri, it seems likely that efforts to attract companies in this industry through their key suppliers and/or customers and/or other partners could be quite successful.
    b. Regarding the targeted industries (and, for that matter, other industries as well), there may be trade associations or other individual and/or institutional stakeholders who could be interested in partnering-up with DED to attract key investors to Missouri. For example, perhaps the Missouri Botanical Garden is interested in motivating a particular domestic and/or overseas company to establish an office or operation in Missouri; assuming so, perhaps some sort of joint effort could be made by the Missouri Botanical Garden and the DED, to achieve that particular objective.
3. Regarding mandatory consumption: It does not appear likely that any state, local, or federal ordinances will be passed which will require domestic and/or overseas firms to invest in Missouri. However, students suggest that to the extent that a

firm's key customers and/or key suppliers and/or other key partners already operate here in Missouri, it may be possible for these organizations to create situations where a particular company feels compelled (by that key supplier, customer, and/or other partner) to establish a presence in Missouri.

4. Regarding international: Students identified a couple of issues here, including the following:
    a. Regarding the overseas offices, students had a variety of different suggestions. Some felt that since the "developed world" offices were producing nearing all of the inbound investment and nearly all of the trade as well, any new initiative by Missouri should focus on "developed world" locations. Other students felt that markets like China should certainly be targeted. It seems likely that resolving this issue will require a review by DED of exactly what role the trade offices are supposed to fill. If their primary objective is to generate inbound investments, it seems unlikely that opening an office in China will be useful. On the other hand, if the primary role of State of Missouri trade offices is to generate and/or expand overseas markets for firms based in Missouri, then opening a trade office in China might be very appropriate. Irrespective of the criterion agreed upon, it seems unlikely that the office in Ghana (a small market, with low Gross Domestic Product per capita (GDP)) will be very successful, unless substantial sales are made to the Ghanaian government and/or industry and/or this office can be used to tap the potential of larger markets elsewhere on the continent (for example, Nigeria and/or South Africa).
    b. From a transportation and logistics point of view, one advantage of Missouri is that it is the population center of the United States. The implication is that for overseas (or, for that matter, domestic) companies desiring to serve their individual consumers efficiently and effectively, and/or for those overseas (or domestic) companies for whom transportation is a particularly important and/or costly issue, Missouri may be a very good place to establish a presence. Students believe that companies using trucks and needing to be able to service every U.S. customer within 24 hours will need a total of four or five U.S. warehouses; students believe too that Missouri can be one of the four or five locations in this sort of distribution system. The ability to move heavy and/or bulky products into the U.S. heartland using cheap water transportation (i.e., barges on the Mississippi and/or Missouri Rivers) could also be an advantage to domestic and/or overseas companies in industries which involve transportation of those sorts of materials or products. Students note that there may be distribution and/or logistics services-related

companies who would be interested in partnering-up with DED to attract additional distribution and/or logistics business from domestic and/or overseas firms.

5. Regarding the idea of broadening the product line: Students had a couple of suggestions here, including the idea that some states have been far more successful in attracting new investments than others. Students suggest that comparing the policies and procedures of states which have been very successful in attracting investments from domestic and/or overseas companies (for example, policies and procedures of the 6-10 states which have been most successful in this regard) might be a very useful benchmarking sort of exercise. Students suggest that comparing the policies and procedures of these highly successful states against the policies and procedures of the 6-10 states which have been least successful in attracting new investments might also be a useful exercise.
6. Regarding new situations: The case does not indicate whether DED partners up with existing Missouri companies and/or institutions to promote Missouri at trade association meetings and/or other opportunities. If not, students recommend that the DED begin working with existing Missouri companies to identify firms (suppliers, customers, other sorts of partners) whose presence in Missouri could strengthen the competitive advantage of firms already operating here. Once a "we need them here in Missouri" firm has been identified, DED could work with existing Missouri companies to attract them here, either through trade association meetings and/or joint presentations (DED and the existing Missouri company) to the targeted company.
7. Regarding new applications: Students believe that it should be possible to use the web and/or the internet in a much more focused and intensive and productive manner. The web/internet-related suggestions made by students include the following:
   a. Some states have been much more effective at attracting inbound investment than others. Several students suggested identifying states which had been very successful and then having a look at the trade development-related websites of those states, to see if there are interesting ideas and/or approaches which DED could use. One idea suggested by several students who looked at the websites of other states is to have portions of the website (for example, sections relating to inbound investment and/or Missouri's unique competitive advantages) available in languages other than English. Another idea suggested by students who examined the websites of other states is to make sure that the DED website features links with trade-related websites such as tradeport.org.

b. Several students suggested that since DED has targeted three industries (that is, plant and life sciences, IT, and advanced manufacturing), there should be places on the DED website where individuals and/or organizations involved in those industries can go to find information which is particularly relevant to their particular industry and their investment decisions. Obviously, this would require that DED do research to uncover the issues and/or information which are especially important to individuals and/or organizations in each of these industries.

c. Several students suggested that DED's use of the website and the internet could be much more proactive. In the case of the targeted industries, for example, students suggested that DED could send (on a regular basis) e-mails to individuals, companies, and/or institutions in those industries. Even better, perhaps, would be to engage in what Godin (1999) calls "permission marketing," that is, contact the individuals and/or institutions in the targeted industries and ask permission from the recipients for DED to send them (on a regular, ongoing basis) information about the State of Missouri's initiatives in this particular industry.

8. Regarding repositioning, and as suggested earlier, students suggested targeting not only firms in the targeted industries (plant and life sciences, IT, and advanced manufacturing) but also key suppliers, customers, and/or other stakeholders who are important to those firms. Students thought that attracting investments to Missouri by partners whose investments strengthen the competitive advantages enjoyed by firms already in Missouri is an especially useful idea. Also, they perceived that if DED partners-up to do this with firms already present in Missouri, those firms may be willing and able to provide resources to compliment and/or supplement the limited resources available to DED.

9. Regarding re-marketing: Several students commented on the need to develop brand equity (that is, the value of the brand) for the State of Missouri. Experts (see for example Aaker 1991) indicate that the key variables for building the value of any brand (including Missouri) include: (1) Brand loyalty; (2) Brand awareness; (3) Perceived quality; and (4) Brand associations. For the targeted industries (that is, plant and life sciences, IT, and advanced manufacturing), it seems likely that DED could positively impact awareness, perceived quality, and the brand associations of Missouri by attending trade association meetings, advertising in trade publications, partnering-up with existing Missouri companies and/or institutions in the targeted industries to attract investments from key suppliers, customers, and/or other partners, and so on.

As for the idea of moving from primary to secondary (that is, value-added services), many students observed that Missouri needs to work toward providing a "one stop" service for potential investors (that is, one location or contact point where would-be investors can get everything they need (information, operating permits, environmental permits, etc.) so as to be able to create and then operate a business in Missouri. Many countries offer such services; surely, the State of Missouri ought to be able to provide this kind of service as well. As for resolving the sorts of conflicts which can arise between the DED on the one hand and the Department of Natural Resources (DNR) on the other, students suggest taking a look to see how other states are handling these sorts of issues. If there are some states which seem to be doing a better job than others in balancing environment versus economic development-related concerns, study and learn from those states..

Regarding the idea of moving from consumer to industrial or the opposite: It appears that the State of Missouri currently targets its trade development initiatives toward organizations and institutions. In the targeted industries, however, there may be certain individuals whose attitudes and opinions impact powerfully on the investment-related decisions of firms in the industry. If so, DED should certainly consider targeting not only institutions in the industry but also individuals who play key influencing roles as well.

EPILOGUE(2)

After receiving and reviewing the suggestions provided by students in the Spring Semester 2004 MK651 class, David Seamon sent the author of the case the following brief comment: ". . . very insightful and very good. I intend to send it (the suggestions) to my project managers and to Director Simmons. Many thanks for providing."

Appendix 1: Case Data Relating to the "Grow the Business" Model

1. *Market penetration*. Ansoff indicates that this option involves increasing one's own market share of existing products and/or services being sold to existing customers. The case provides no information which directly addresses this option. The large decline in venture capital invested in Missouri over the period 2000-2002 ($766,000,000 in 2000, $169,500,000 in 2002) suggests that Missouri may be losing (rather than gaining) market share from existing customers. The case suggests that one factor which could be contributing to this loss of investment is that investors are disadvantaged by the fact that Missouri does not have a "one-stop" orientation toward investments, i.e., there is no one contact point from which potential investors can receive not only information about

opportunities in Missouri but also the licenses and/or permits they would need so as to be able to operate in the state.

2. *Market development*. Ansoff indicates that this option involves selling existing products and/or services to new customers. The case indicates that the Missouri Department of Economic Development, in an attempt to attract trade and/or new inbound investments (i.e., new offices and/or factories) from overseas investors, has opened overseas trade offices in a number of locations around the world, including Accra, London, Mainz, several locations in Mexico, Seoul, Taipei, and Tokyo. In other words, the Department of Economic Development is vigorously pursuing the "market development" option. As for the performance of these overseas offices, Tokyo has generated 137% of its $75,000,000 inbound investment quota and London has generated 26% of its $100,000,000 inbound investment quota; all other overseas offices together have generated only $3,000,000 of inbound investments. As for trade developed by the overseas offices, the London office has generated more than ten times its $150,000,000 quota, the Tokyo office has generated 78% of its $100,000,000 quota, and the Guadalajara (Mexico) office has generated 56% of its $50,000,000 quota. Total trade developed by all other offices is less than $4,000,000.
3. *Product development*. Ansoff indicates that this option involves selling new products and/or services to existing customers. The case does not indicate whether the Missouri Department of Economic Development is pursuing this option.
4. *Diversification*. Ansoff indicates that this option involves selling new products and/or services to new customers. The case indicates that the Missouri Department of Economic Development has targeted companies in three industries (plant and life sciences, information technology, and advanced manufacturing) to receive special promotional efforts and attention.

Appendix 2: Case Data Relating to the Turnaround Strategy Model

1. *Entrenchment*: According to Sheth, this turnaround option involves taking market share away from competitors. Four approaches which he suggests considering are: (a) segment the market (and then introduce different products and/or services for each segments); (b) identify specialty markets; (c) go after heavy users of the product or service; and (d) seek multiple channels of distribution. As indicated in the case, the Missouri Department of Economic Development has identified four industries (plant and life sciences, information technology, and advanced manufacturing) as being of special interest, and has targeted these areas for special promotional efforts.
2. *Intermediaries*: Sheth indicates that the idea behind this option is to sell to some sort of intermediate customer, not to individual customers one-by-one. There is no data in the case

suggesting that the Missouri Department of Economic Development is attempting to generate trade and/or investments through intermediaries.

3. *Mandatory consumption*: Sheth indicates that this turnaround option involves changing the environment in such a way that customers are required (by governments, for example) to purchase the product. It seems very unlikely (and, there is no data in the case suggesting it, either) that any governmental unit would require a company to invest in and/or initiate trade with Missouri.
4. *Go international*: Sheth indicates that this turnaround option has four substrategies: (a) global marketing (no changes to the positioning or the actual product or service); (b) product differentiation (the actual product or service is adjusted); (c) market differentiation (the positioning used overseas is adjusted; and (d) unique marketing (both the positioning and the actual product or service is changed). While it is not clear exactly which of the above options the Missouri Department of Economic Development is using, it is clear that the department has made major efforts (through its trade development offices in Accra, London, Mainz, several locations in Mexico, Taipei, Seoul, and Tokyo) to develop trade and inbound investments from overseas firms.
5. *Broaden the Product Line*: This option, according to Sheth, involves thinking of the function filled by a product or service and then thinking of the product or service as a component in a system. The case does not provide any examples of the Missouri Department of Economic Development utilizing this approach.
6. *New situations*: Sheth indicates that this turnaround option involves seeking out different times, places, and/or images and positioning for a product or service. The case does not provide any examples of the Missouri Department of Economic Development utilizing this approach.
7. *New applications*: According to Sheth, this turnaround option usually involves some sort of functional change in the product. The case does not provide any examples of the Missouri Department of Economic Development utilizing this approach.
8. *Repositioning*: Sheth indicates that this turnaround option involves defining the image of a product or service into new usage situation within the same general application context. The case does not provide any examples of the Missouri Department of Economic Development utilizing this approach.

9 *Redefine markets*: According to Sheth, there are four approaches to this turnaround option: (a) convert a generic (unbranded) product to a branded product; (b) shift from primary (that is, basic) to secondary (that is, bundled with additional services) products or services; (c) shift from selling to industrial/ institutional customers to final customers; and (d) shift from selling to individual customers to selling to industrial/institutional customers. The only evidence in the case of use (or mis-use) of any of the above strategies is the fact that the State of Missouri does not operate a “one-stop” investment office, where potential trade

and/or investment partners could receive not only information but also the permits required to be able to operate in Missouri.

REFERENCES

Aaker, D. (1991). *Managing brand equity: Capitalizing on the value of a brand name.* New York: The Free Press.

Ansoff, I. (1957). Strategies for diversification. *Harvard Business Review, 35*(5), 116

Godin, S. (1999). *Permission marketing: Turning strangers into friends and friends into customers.* New York: Simon & Schuster.

Sheth, J. (1985). *Winning back your market: The inside stories of the companies that did it.* New York: John Wiley & Sons.

ST. LOUIS CHEMICAL: THE INVESTMENT DECISION

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CASE DESCRIPTION

The primary subject matter of this case concerns the issues surrounding evaluation of capital expenditures. Case provides a systematic approach to evaluating capital expenditures including a review of alternative capital budgeting methods and the relationship between cost of capital and capital budgeting. Secondary issues include cost of capital theory and the advantages and disadvantages of financial leverage. The case requires students to have an advanced knowledge of accounting, finance and general business issues thus the case has a difficulty level of four (senior level) or higher. In particular, an understanding of capital budgeting practices and cost of capital issues are necessary to solve the case. The case is designed to be taught in one class session of approximately 1.25 hours and is expected to require 4-6 hours of preparation time from the students.

CASE SYNOPSIS

St. Louis Chemical is a regional chemical distributor, headquartered in St. Louis. Don Williams, the President and primary owner, began St. Louis Chemical five years ago after a successful career in chemical sales and marketing. The company reported small losses during it first two years of operation but has since reported increasing sales and profits. The growth has required the acquisition of equipment, expansion of storage capacity and increasing the size of the work force.

The unexpected withdrawal of one of St. Louis Chemical's competitors from the region has provided the opportunity to increase its packaged goods sales, in particular, sales of material in 55 gallon drums. However, St. Louis Chemical's 55 gallon drum filling equipment is already operating at capacity. To take advantage of this opportunity, additional equipment must be obtained, requiring a major capital investment. It is estimated that St. Louis Chemical must increase its drum filling capacity by at least 200,000 to 400,000 drums annually. The firm has no systematic capital expenditure evaluation process or an estimate of its cost of capital.

INSTRUCTORS' NOTES

CASE OVERVIEW

As the case opened Don Williams, the President of the St. Louis Chemical, a regional chemical distributor, headquartered in St. Louis is considering the opportunity to increase its packaged goods sales, in particular, sales of material in 55 gallon drums. The company's 55 gallon drum filling equipment is operating at capacity, thus to take advantage of this opportunity, additional equipment must be obtained, requiring a major capital investment. It is estimated that, St. Louis Chemical must increase its drum filling capacity by at least 200,000 to 400,000 drums annually.

Williams is considering two alternatives proposed by the company's engineer. The first is the acquisition and installation of used equipment that will provide the capacity to fill an additional 200,000 fifty-five gallon drums annually. The used equipment will cost $860,000 to acquire and install. The equipment is projected to have an estimated life of three years. The second option is the acquisition and installation of new equipment with the capacity to fill 400,000 drums annually. The new equipment would cost $2,480,000 to acquire and install and have an economic life of seven years. The new equipment is more efficient thus the cost to fill a drum is less than the per drum filling cost of the used equipment. Williams asked Bush to lead the evaluation process. The company does not have a formal evaluation process for capital projects.

Bush thinks the used equipment could be obtained without new bank debt. The acquisition of the new equipment would require new bank borrowing. Bush feels that Williams may be willing to consider using debt if she can convince him of the advantages of using debt in the firm's capital structure. The evaluation of each alternative requires an estimate of the financial benefits associated with each.

The learning objectives of the case include: 1) Introducing students to a systematic approach to capital budgeting decisions 2) Examining how firm's cost of capital is calculated and financial theory regarding a firm's optimum capital structure 3) Examining the relationship between a firm's cost of capital, capital budgeting and long-term financial performance 4) Examining capital expenditure evaluation techniques (NPV, IRR and Cash Payback and 5) Exploring non-financial issues that need to be considered when evaluating capital expenditures.

DISCUSSION QUESTIONS

1. Prepare a presentation for Williams regarding the concept of WACC.

Simply stated the weighted average cost of capital (WACC) is the cost the company is paying to finance its assets and reflects the riskiness of the firm or the firm's assets. As its name indicates, it is a weighted average of the costs of the various sources of capital (debt and equity) used in the firm's capital structure. What is not so readily apparent by its name is that the WACC is an after-tax cost. In other words, it is calculated using the after-tax cost of each source of capital. Interest paid by a business is tax deductible, thus the cost of debt needs to be converted to an after-tax cost by multiplying the before-tax interest rate by one minus the firm's marginal income tax rate. The firm's WACC is also referred to as the firm's marginal cost of capital or what a firm must pay for its next dollar of capital. Another point that should be made is since the WACC is used by businesses to evaluate possible long-term expenditures (capital projects), only long-term capital sources are included in the calculation. Thus, most firms do not include the cost of short-term debt in the calculation.

To determine WACC, a firm must 1) calculate the cost it must pay for each source of capital and 2) determine the target mix of debt and equity to be used by the firm. The cost of each source of capital and the target capital structure are provided in the case. St. Louis Chemical's before-tax cost of debt is given as 10% and its cost of common equity is given as 16%. St. Louis Chemical's target capital structure is given as 30% debt and 70% equity. For a detailed discussion of how a firm calculates its cost of debt and cost of equity, see Eugene Brigham and Joel Houston's "Fundamentals of Financial Management," 10th edition, Thompson-Southwestern Publishers or a number of other finance textbooks.

2. Calculate St. Louis Chemical's WACC (round to the nearest whole number). What arguments should be made to convince Williams of the advantage of using long-term debt in the firm's capital structure?

WACC formula:

$$\text{WACC} = w_d\,(k_d)\,(1\text{-}t) + w_s\,(k_s)$$

Where:
w_d = weight of debt in the company's target capital structure
K_d = before-tax cost of debt
t = marginal income tax rate
w_s = weight of equity in the company's target capital structure
k_s = cost of equity

St. Louis Chemical's WACC = .30 (.10) (1-.30) + .70 (.16)
= .021 +.112
= .133 or 13.3% use 13%

The best argument that can be made to convince Williams to use debt capital in its capital structure is to calculate the firm's WACC with and without debt. Without debt, the firm's cost of capital is 16% (cost of capital and cost of equity are the same) and with 30% debt, its cost of capital is 13%. The use of debt lowers St. Louis Chemical's cost of capital because low cost debt capital is substituted for high cost equity capital. Debt has a lower cost than equity because to the holder of debt there is less risk. Debt has less risk because the certainty of payments associated with debt (interest and principal) is greater than the payments associated with equity (dividends and stock appreciation). Debt payments are legal obligations thus are paid before any payment to equity shareholders. Because there is less risk associated with debt, the providers of debt are satisfied with a lower but more certain return. The downside of debt is the fixed nature of the payments, thus the use of debt by a firm increases its financial risk. The more debt a firm has, the greater the financial risk or financial leverage. The introduction of debt into a firm's capital structure will at first cause the WACC to decline, but eventually the use of large amounts of debt will cause the WACC to increase. What businesses attempt to achieve is a capital structure which provides the lowest cost of capital because it is at that point the value of the firm is maximized.

3. Since the used equipment will be financed with internal capital and the new equipment with a bank loan, should the same discount rate be used to evaluate each alternative? Explain.

The discount rate used to evaluate the project reflects the risk level of the project, not the cost of the financing. The cost of capital represents the risk level of the firm's assets, and since both alternatives appear to have the same risk level as the firm's existing assets, the cost of capital should be used to evaluate each alternative.

4. Explain why an accurate WACC is important to a firm's long-term success.

A firm's WACC is used to assess investment decisions. Assets must return at least the firm's cost of capital (what it must pay for the capital to acquire the asset). If an asset's return is less than the WACC, shareholders will not receive their required return. If a firm underestimates its WACC, it may invest in assets (projects) that do not yield the necessary return. If a firm overestimates its WACC, it may not invest in assets that would yield the necessary return (missed opportunities). Either error will result in problems. If the WACC is underestimated, the firm risks losing equity capital as unsatisfied investors take their funds elsewhere or will have difficulty raising capital in the future. If the WACC is overestimated, the firm risks missing profitable growth opportunities. Making investment decisions based on informal analysis is an unacceptable process and will not result in an effective allocation of the firm's scarce resources.

5. **Evaluate the strengths and weaknesses of the NPV, IRR and Cash Payback Period capital expenditure budgeting methods. Prepare a recommendation for Williams regarding the capital budgeting method or methods to use in evaluating the expansion alternatives. Support your answer.**

Cash Payback Period is the number of years it takes a firm to recover the original investment. For example, if a capital project requires an investment of $10,000 and is expected to return $5,000 for each of the next four years, the Payback Period would be two years. The advantages of the Payback Period include: 1) easy to calculate and explain, 2) focuses on future cash flows, and 3) places a premium on liquidity (i.e. a quick return of the investment). Disadvantages: 1) ignores time value of money (i.e. a dollar received in year three is assumed to be worth the same as a dollar received today), 2) ignores cash flows beyond the payback period, and 3) does not include an accept/reject feature.

Net Present Value (NPV) method is determined by 1) calculating the present value of the future cash flows (using the WACC as the discount rate) and 2) deducting the project's cost from the present value of the future cash flows. If the present value of the future cash flows exceeds the project's cost, the project is said to have a positive NPV. Stated another way, if the project's value (the present value of its future cash flows) exceeds its cost, the project is a good investment and should be accepted. Advantages of this method include: 1) focuses on future cash flows, 2) takes into account time value of money, 3) considers all cash flows associated with the project, and 4) includes an accept/reject feature. Disadvantages: 1) relatively difficult to explain and calculate, and 2) requires knowledge of a firm's WACC.

Internal Rate of Return (IRR) method is calculated by determining the discount rate that will cause the present value of the future cash flows to equal the project's cost. The discount rate is the project's internal rate of return (IRR). If the IRR exceeds the firm's WACC, the project should be accepted. Advantages of this method include: 1) focuses on future cash flows, 2) takes into account time value of money, 3) considers all cash flows associated with the project, and 4) does not require knowledge of a firm's WACC. Disadvantages: 1) relatively difficult to explain and calculate, and 2) if the project's future cash flows include some years with cash outflows rather than cash inflows, multiple IRRs may result.

Recommendation should include the use of all evaluation methods because each provides valuable information regarding a potential project. Priority should be given to the results of the NPV method because it compares the projects value (the present value of future cash flows, determined by using the firm's WACC as the discount rate) to the projects cost. If a project's value exceeds its cost, it is a good investment. For a more complete discussion of the superiority of the NPV method over the other techniques, see Eugene Brigham and Joel Houston's "Fundamentals of Financial Management".

6. **Calculate the NPV, IRR and Cash Payback for each alternative by completing Schedules One and Two. For these calculations, assume a WACC of 13%. Based strictly on the results of these methods, should either option be selected? Why? How could the analysis be improved? Solution requires preparation of a spreadsheet.**

See Schedule One and Two for complete calculations. Results are:

Evaluation Method	Used Equipment	New Equipment
Net Present Value (NPV)	$43,795	$190,238
Internal Rate of Return (IRR)	14%	15%
Cash Payback Period	3.00 years	5.29 years

The Cash Payback Period assumes annual operating cash flows are received evenly over the course of the year while the NPV and IRR assume operating cash flows are received at the end of the year. The Cash Payback Period for the used equipment is 3 years. The full amount of the investment is not recovered until the project is terminated. Based on the results of the evaluation methods, the new equipment would be selected because of the higher NPV.

Note: The case includes two schedules which will aid students in preparing the solution, but the schedules can be omitted to provide a more challenging case.

7. **The projected cash flow benefits of both projects did not include the effects of inflation. Future cash flows were determined using a constant selling price and operating costs (real cash flows). The cash flows were then discounted using a WACC that included the impact of inflation (nominal WACC). Discuss the problem with using real cash flows and a nominal WACC when calculating a project's NPV or IRR.**

In general, using "real" future cash flows and a "nominal" WACC will result in an understated NPV and IRR or both will have a downward bias. If inflation is neutral, impacting revenues and costs equally, the NPV and IRR will be underestimated. Because revenues are usually greater than costs, revenues will increase by a greater dollar amount than costs. The exact impact of combining "real" cash flows and a "nominal" discount rate can only be determined by removing the impact of inflation from the discount rate or adding the impact of inflation to the future cash flows.

8. What other issues should be considered before a final decision regarding the expansion alternatives is made?

The analysis is based on a single point estimate, and it is highly unlikely that future sales volume will exactly equal projected sales. Although both alternatives appear to be highly profitable, it would be beneficial to evaluate profitability at lower sales volumes. At what minimum level of sales will the projects still be acceptable? The point of this question is to illustrate to the students that the financial analysis is only part of the decision-making process.

REFERENCES

Brigham, Eugene & Joel Houston, *(2004). Fundamentals of Financial Management,* (10th edition), South-Western, a Division of Thomson Learning.

Brigham, Eugene & Michael Ehrhardt, (2002). *Financial Management: Theory and Practice,* (10th edition), Harcourt Brace College Publishers.

Schedule One	**Used Equipment**			
	Year 0	Year 1	Year 2	Year 3
Sales Volume (drums)		170,000	190,000	215,000
Selling Price (per drum)		$35.00	$35.00	$35.00
Drum Filling Cost (per drum)		$1.75	$1.75	$1.75
Material Variable Cost (per drum)		$30.50	$30.50	$30.50
Total Variable Cost (per drum)		$32.25	$32.25	$32.25
Tax Rate		30%	30%	30%
WACC		13%	13%	13%
Working Capital (% of Sales)		10%	10%	10%
Required Working Capital ($)		595,000	665,000	752,500
Required Incr. in Working Capital ($)			70,000	87,500
Acquisition Cash Flow	$			
Equipment Costs	860,000			
Increase in WC (10% of sales)	595,000			
Total Project Cost	1,455,000			
Operating Cash Flow Projections		$	$	$
Sales		5,950,000	6,650,000	7,525,000
Variable Costs		5,482,500	6,127,500	6,933,750
Gross Profit		467,500	522,500	591,250
Depreciation Expense		283,800	387,000	129,000
Earnings Before Taxes		183,700	135,500	462,250
Income Taxes		55,110	40.650	138,675
Earnings After Taxes		128,590	94,850	323,575
Depreciation Expense		283,800	387,000	129,000
Operating Cash Flows		412,390	481,850	452,575
Increase in Working Capital		0	(70,000)	(87,500)
Annual Cash Flow		412,390	411,850	365,075
Terminal Cash Flow	$			
Sale of Equipment	50,000			
Book Value	60,200			
Taxable Gain	(10,200)			
Income Taxes	(3,060)			
Cash Flow From Sale of Equipment	53,060		(50,000-3,060)	
Liquidation of Working Capital	752,500			
Terminal Cash Flow	805,560			
	Year 0	Year 1	Year 2	Year 3
Cash Flows ($)	(1,455,000)	412,390	411,850	1,170,635*
* Year 3 Operating Cash Flow and Terminal Cash Flow				
NPV $43,795	**IRR**	14%	**Cash Payback Period**	3.00
	Cash Flow ($)	Cumulative CF ($)		
Year 0	(1,455,000)			
Year 1	412,390	(1,042,610)		
Year 2	411,850	(630,760)		
Year 3	365,075	(265,685)		
End of Year 3 (Terminal CF)	805,560	539,875		

Schedule Two (page 1) **New Equipment**

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Sales Vol.- Total (drums)		170,000	190,000	215,000	235,000	275,000	310,000	370,000
Selling Price ($/per drum)		35.00	35.00	35.00	35.00	35.00	35.00	35.00
Filling Cost ($/per drum)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Matl. Var. Cost ($/per drum)		30.50	30.50	30.50	30.50	30.50	30.50	30.50
Total Var. Cost($/per drum)		31.50	31.50	31.50	31.50	31.50	31.50	31.50
Tax Rate		30%	30%	30%	30%	30%	30%	30%
WACC		13%	13%	13%	13%	13%	13%	13%
WC as Percent of Sales		10%	10%	10%	10%	10%	10%	10%
Required WC	$595,000	$595,000	$665,000	$752,500	$822,500	$962,500	$1,085,000	$1,295,000
Required Increase in WC			$ 70,000	$87,500	$70,000	$ 140,000	$122,500	$210,000

Acquisition Cash Flow	Year 0
Equipment Costs	2,480,000
Increase in WC	595,000
Total Project Cost	3,075,000

Operating Cash Flow Projections

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Sales	5,950,000	6,650,000	7,525,000	8,,225,000	9,625,000	10,850,000	2,950,000
Variable Costs	5,355,000	5,985,000	6,772,500	7,402,500	8,662,500	9,765,000	11,655,000
Gross Profit	595,000	665,000	752,500	822,500	962,500	1,085,000	1,295,000
Depreciation Expense	347,200	620,000	421,600	322,400	223,200	223,200	223,200
Earnings Before Taxes	247,800	45,000	330,900	500,100	739,300	861,800	1,071,800
Income Taxes	74,340	13,500	99,270	150,030	221,790	258,540	321,540
Earnings After Taxes	173,460	31,500	231,630	350,070	517,510	603,260	750,260
Depreciation Expense	347,200	620,000	421,600	322,400	223,200	223,200	223,200
Operating Cash Flows	520,660	651,500	653,230	672,470	740,710	826,460	973,460
Increase in WC	-	(70,000)	(87,500)	(70,000)	(140,000)	(122,500)	(210,000)
Annual Cash Flows	520,660	581,500	565,730	602,470	600,710	703,960	763,460

Terminal Cash Flow

	Year 7
Sale of Equipment	120,000
Book Value	99,200
Taxable Gain	20,800
Income Taxes	6,240
Cash Flow From Sale	113,760
Liquidation of WC	1,295,000
Terminal Cash Flow	1,408,760

Schedule Two (page 2)

	Years 0	Years 1	Years 2	Years 3	Years 4	Years 5	Years 6	Years 7
Cash Flows ($)	(3,075,000)	520,660	581,500	565,730	602,470	600,710	703,960	2,172,220

NPV	$190,238
IRR	15%
Cash Payback Period	5.29

	Cash Flow ($)	Cumulative CF ($)	
Year 0	(3,075,000)		
Year 1	520,660	(2,554,340)	1.00
Year 2	581,500	(1,972,840)	1.00
Year 3	565,730	(1,407,110)	1.00
Year 4	602,470	(804,640)	1.00
Year 5	600,710	(203,930)	1.00
Year 6	703,960	500,030	0.29
			5.29