CHAPTER 2: IMPLEMENTING STRATEGY: THE VALUE CHAIN, THE BALANCED SCORECARD, AND THE STRATEGY MAP

EXERCISES

2-28 Execution; Competitive Strategy (20 min)

1. The critical aspect of the analysis of this special order is how it will affect the brand image of Deaine's clothing. Deaine appears to compete on the basis of product differentiation, that is, its clothing is perceived to be of higher quality, attractiveness, etc. DEI is thus able to sell its clothing in upscale designer clothing retail stores, probably at a premium price. Sale of the same or similar clothing to department stores could dilute the brand image, and thus hurt the sales in the upscale retail stores. Customers who are willing to pay the premium to purchase the clothing in the designer stores may not be willing to do so if the same or similar clothing is available in department stores. Thus, while the special order might be very profitable in the short run, in the long run it is potentially very damaging for the company.

   The main point of this case, and a pervasive theme of strategic cost management, is that cost analysis from a strategic perspective can often provide a different answer from the cost analysis which has a short-term point of view. In practice, many cost systems have a short-term focus, and the strategic emphasis of strategic cost management is used to bring the firm's operations and decision making back to consistency with the firm's strategic objectives.

2. A SWOT analysis would be useful to Joel to help him more thoroughly understand the key critical success factors of his strategy and to therefore help him more effectively implement the strategy. Also, a value chain analysis would help him to understand his overall strategy and the linkages of the critical success factors in a more systematic and detailed manner. A balanced scorecard would provide Joel a means to organize

these critical success factors and to regularly measure progress on each of them.

2-30 Value Chain; Currency Fluctuations (15 min)

The increase in the value of the Brazilian currency relative to that of one of its chief trading partners, China, will likely have a significant impact on Brazilian companies, particularly those that require parts for products or other materials that are commonly sourced from China. The increase in the value of the Brazilian currency (theReal) will mean that these companies will find it increasingly cheaper to outsource production or purchase of these items from China, and the effect will be that local Brazilian producers of these items will not be able to compete with the lower (foreign exchange adjusted) products from China. Some Brazilian companies will benefit as the purchase of parts or materials at lower cost from China will bring the overall cost of their products down, and thus make the company more price competitive. On the other hand, the Brazilian companies that manufacture these parts will suffer the loss of the business. Thus those companies whose value chain requires the acquisition of the parts of materials will benefit, while those whose value chain involves the production of these parts and materials will suffer.

Note that the reverse would be true if the value of the Real were to fall relative to the Yuan or other currencies. Then, the advantage would be to local producers.

Source: “Brazil Opts for Deeper Rate Cut to Stoke Recovery,” Reuters, March 7, 2012; John Lyons and Tom Barkley, ”Brazil Leader Slams U.S. Money Policy,” *The Wall Street Journal*, April 10,2012, p.A8; Arnaldo Galvao and Iuri Dantas, “Brazil May Ask WTO About Possible Action on Weak Currencies, Official Says,” Bloomberg.com, January 18, 2011; Matthew Bristow, “Latin Currencies Keep Rising – Until They Don’t,” *Bloomberg Businessweek*, August 15, 2011, pp 12-13; Jeffrey T. Lewis, “Brazil’s Currency Unlikely to See Respite After Rate Cut,” *The Wall Street Journal*, September 1, 2011; Tom Lauricella, Alex Frangos and John Lyons, “Emerging Markets Tumble,” *The Wall Street Journal*, September

23, 2011, p. C1; John Lyons, "The Dark Side of Brazil's Rise," *The Wall Street Journal*, September 13, 2011.

2-32 Value Chain; Sustainability (15 min)

The example of a hypothetical company, CleanTech, is based on an actual example reported by Julie Lockhart, Audrey Taylor, Karl Thomas, Brenda Levetsovitis, and Jason Wise, "When Higher Price Pays Off," *Strategic Finance*, January 2011, pp 29-35.

1. The role of the value chain is to assist the company in identifying opportunities for adding value and reducing cost. In this case there is an opportunity for both adding value and reducing cost for both CleanTech and its customers. The complete value chain analysis for the new system illustrated in the article shows that the new system would save the cleaning company several thousand dollars per year. Moreover, it would avoid the disposal of harmful waste products, because the system is designed to simultaneously clean the tank and the waste fuel in the tank. Thus, there is no need to dispose of the waste fuel. This saves the cost of replacing the fuel, but perhaps more importantly, it avoids the environmental damage of having to dispose of the waste fuel, as would be required in CleanTech's current cleaning system.
2. The sustainability issues associated with the disposal of the environmentally harmful waste fuel could be included both financially and non-financially. It could be included financially in cost measures (cost of replacing the waste fuel for example) and in non-financial measure (for example, gallons of fuel that were saved from disposal). The consequences of preventing waste fuel from being disposed of could be measured by environmental engineers, and these measures could also be included. Some consequences might be difficult to quantify, such as the long-term effect on plants and wildlife, but these consequences should also be included in the decision analysis.
3. Whether or not CleanTech purchases the new system, since it handles environmentally harmful materials, it would be a benefit to the company and its community for CleanTech to adopt the sustainability scorecard. In this way, the company can keep track of the environmental effects of different choices the company must

make, including the potential purchase of the new cleaning system. Some examples of scorecard measures include gallons of fuel recycled, gallons of fuel disposed of in a waste facility, and carbon emissions.

2-34 Ethics; Sustainability (15 min)

This exercise is intended primarily for class discussion, and since ethical issues are addressed, the students' answers must be treated with proper understanding of the student's ethical position and perhaps the student's looking for guidance. The answers for each case are based on actual responses from an academic study using 97 coffee drinkers (cases A and B), 84 different coffee drinkers (case C) and 218 participants (case D)

Case A: a)$9.71
b)$5.89
c)$8.31

Case B: a)$11.59
b)$6.92

Case C: a)$9.90
b)$8.44

Case D: a)$21.21
b)$20.44
c)$20.72
d)$17.33
e)$20.04

Taken together, the results suggest that the participants valued ethical standards and sustainable production methods. However, the premium paid for high ethical standards or for sustainability was not nearly as great as the penalty (lower price) for known unethical behavior or lack of sustainability. Note also the very small difference between the prices paid for the shirts with different levels

2-34 (continued -1)

of organic content, relative to the shirt with no organic content, suggesting that the consumers were rewarding an effort, even if a small one, to achieve sustainability.

Each class will have different results, and these differences can be used for a discussion of the value to the consumer of ethical behavior and sustainability.

Source: RemiTrudel and June Cotte, "Does Being Ethical Pay?" *The Wall Street Journal*, May 12, 2008, p R4.

PROBLEMS

2-36 Strategic Positioning (20 min)

Farming is basically a commodity operation, and this is true of Fowler's farm as well. The products are difficult to differentiate except by grade which can affect market prices to some degree. For this reason, the best description of the farm's strategy is cost leadership. This strategy is also consistent with the financial problems facing farms in the U.S. The Farm Aid concerts sponsored by Willie Nelson and others are an illustration of the broad concern of the diminishing profits of farming. Also, the case notes price pressures facing the Fowler farm. Good cost management is becoming more critical for successful farming, and this appears to be at the top of Kelly's agenda.

2-38 Value Chain Analysis (20 min)

The value chain should identify the elements or activities in the value chain in enough detail that Kelly can identify potential areas for cost reduction. One representative example (only one possible example) of a value chain for the farm is as follows.

Value Activity	Timing
Soil Preparation	February - March
Obtain seed, fertilizer and supplies	February-April
Planting	April
Weed control and irrigation	May – July
Harvesting	August – September
Sort, clean and package for sale	August – September

2-40 Strategic Positioning (20 min)

Because of the emphasis in the case information on product quality and craftsmanship, the strategy for Tartan (the reason it has been successful) is best described as differentiation on the basis of quality. While there are some cost concerns for the company, particularly with the Classic line, these are not critical to the company's success. In contrast, the company is most likely to succeed if it can continue to appeal to those customers looking for up-scale, higher quality lamps and lighting fixtures. The Classic line is critical to this strategy since it is the original product line for the company, and the most identified with quality and craftsmanship.

When using differentiation as the Company's strategy, it becomes clear that maintaining the Classic line is critical to the company's success. Thus, elimination of the line could damage the firm's quality and craftsmanship image, and thus hurt the company's strategic competitive advantage. Even if the Classic line is losing money for the company, it is important to both retain it and to publicize it, because it is the product line which most supports the company's quality image.

Since sales of the Classic line seem to be focused on the northeast states, it might be appropriate to obtain efficiencies by focusing manufacturing and distribution efforts in these states. However, the marketing of the Classic line should continue to be throughout all sales regions because of the strategic importance of the Classic line.

The Classic line can be considered an example of what is sometimes called a "loss leader," a product or service that draws attention to the company, but which in itself is not profitable.

2-42 Value Chain Analysis (30 min)

There are a large number of possible value chains for a company such as Tartan. The value chain provided below is a representative example. A solution such as this should include upstream, manufacturing, and downstream activities – all the way from product planning and research to customer service.

Value Activity (in sequence)	**The Role of this Activity**
Market research	To benchmark and maintain our overall strategy
Product planning	Importance of developing new products
Advertising and Promotion	Stress the firm's quality
Product design	Focus on innovation, quality
Develop bill of materials	May need long lead times to acquire the best quality materials
Source parts and skilled labor	Very important because of Tartan's reputation for quality and craftsmanship
Scheduling production	A critical step because of long lead times and tight labor resources

Cutting and trimming materials	Importance of quality
Assembly	Importance of quality
Finish and painting	Importance of quality
Preparation for Shipment	Importance of quality
Invoice customer	Accuracy, customer service
Customer service	A key step in the differentiation strategy
Warranty returns and allowances	Treat these as opportunities for product redesign and improvement, i.e., on-going redesign
Customer satisfaction follow-up	Important to Tartan's differentiation strategy

2-42 (continued -1)

Here are some points that address why the value chain is important to profitability and overall competitiveness. Many of these point to questions about Tartan's operations that go beyond the data available in the case; for these points, the role of the value chain is to help to identify the important questions.

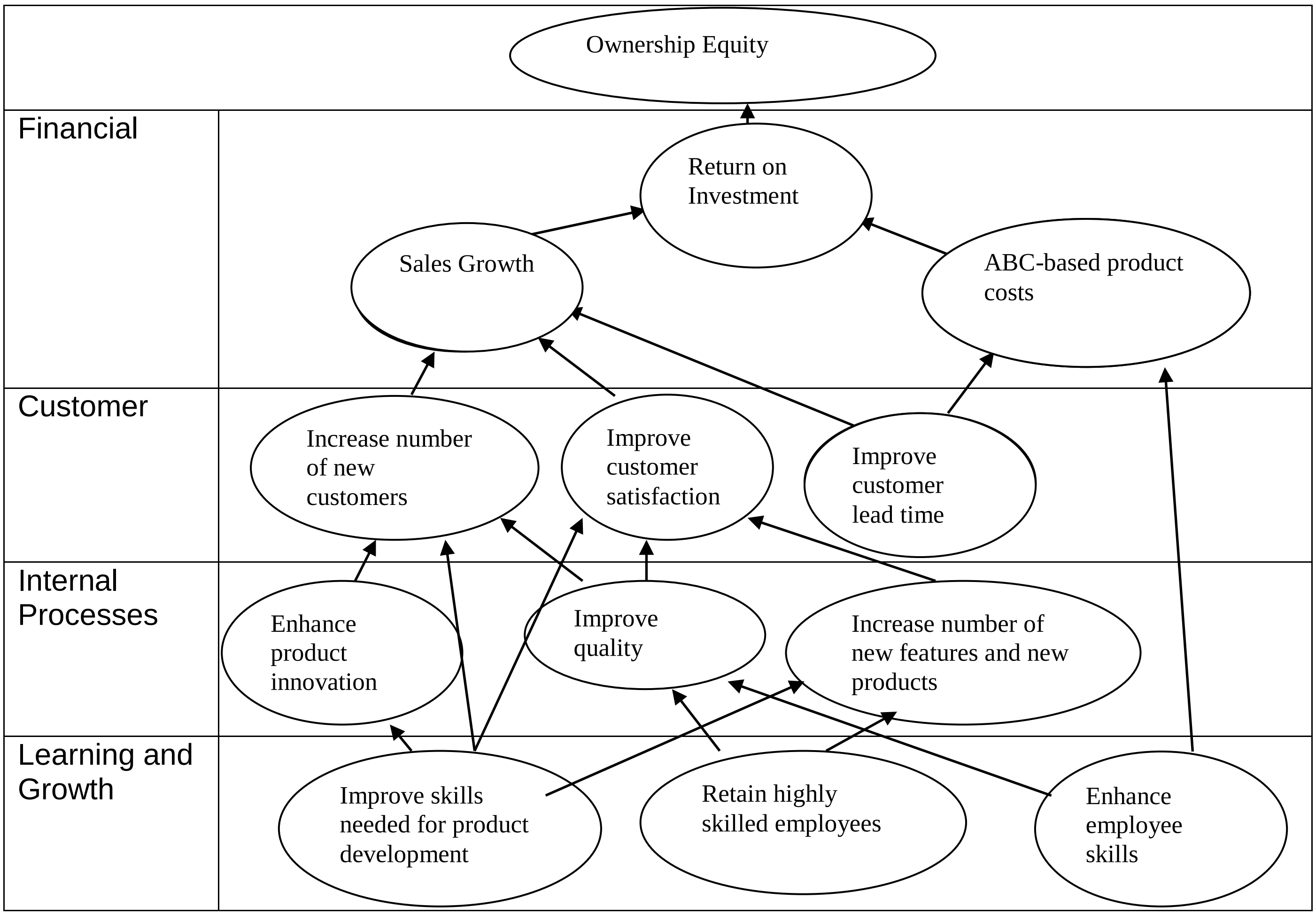
1. The value chain provides a basis for identifying those activities for which the firm is very competitive and those for which it is not competitive. In this case, the upstream activities of design and manufacturing are probably at the heart of Tartan's past success, as the firm has developed a reputation for products of high quality. Customer service is also a key to maintaining the firm's differentiation strategy. The use of the value chain should highlight this important activity and draw the firm's attention to its performance in that activity.
2. Since manufacturing capacity is overall pretty tight, the value chain can be used to help identify those activities where the capacity is especially tight and those where there is some slack, to draw appropriate attention where it is needed. Is the capacity problem primarily in cutting and trimming, assembly, shipping…?
3. The value chain can be used to benchmark specific activities, perhaps against industry figures for manufacturing productivity,

and so on. Most industries, including the lighting manufacturer's industry, collect and publish summarized information about operating performance of firms in the industry. As a member of the industry association, Tartan would have access to this type of information. Areas to benchmark would include manufacturing performance (productivity, rejects for production defects, sales order lead times, customer service response time, etc.).

4.

2-44 Strategy Map (20 min)

There are a variety of possible answers to this question. Here is an example.



2-46 Strategic Analysis (15 min).

Jim's new business is likely to face great competition, as there are already a number of firms in this market. What Jim must do to have a successful business is differentiate his business from the other Internet firms. Since the current competition is successful at low cost and fast delivery, Jim must seek other ways to differentiate his business. Because of his experience, it is likely that he can differentiate his business by finding and developing unique products that are not available from competing sources. If Jim has been successful at racing, his racing credentials can serve as a critical success factor, in addition to the unique products.

The cost management information Jim is likely to need will be in planning and decision making, at least initially. He will need carefully developed expense budgets, to control his cash expenditures until a stable sales pattern emerges. He will also need cost management information for setting prices, evaluating product profitability, and evaluating potential new products. These cost management methods are explained in Part Two of the book.

2-48 Strategic Analysis; The Camera Industry (40-50 min)

1. The objective of this problem is to have the students understand that the concept of competition is perhaps not as simple as set out in Porter's framework. We use Porter's framework because it provides a useful organizing theme for understanding how firms compete. But the context of the camera companies and how they compete at price points shows an understanding of competition that can be more complicated.

   Some argue that Porter's view of strategy and competition does not adequately describe the intensity of competition in certain industries, particular certain consumer products industries such as cameras. Porter's concept, as well as that of the build and harvest concepts of the Boston Consulting Group, conceive of a competitive equilibrium in which the firms in an industry find a stable, relatively long-term mode of competition, often called "sustainable competitive advantage." This might be cost leadership or product differentiation. The major point is that, by applying the cost leadership strategy for example, a firm remains competitive and successful as long as it remains the cost leader. Some argue that the competition in certain industries is far too intense to have any one firm achieve more than a temporary advantage, whether it be on cost or differentiation.

   Instead, each firm must simultaneously compete on the three competitive factors: cost (low cost and low price), quality (conformance of the product with advertised features and specifications), and functionality (the product's features; its ability to perform the desired task). Robin Cooper makes a persuasive case (*When Lean Enterprises Collide*, *Harvard Business School Press*, 1995) that most firms in the consumer products industries do not achieve a competitive advantage. In particular, the camera companies tend to compete simultaneously on price, quality and functionality. This happens because cameras are sold at a certain "price point" of $49 or $99, etc., and the consumer expects to get as many desirable features as possible at the targeted price.

2-48 (continued -1)

It is assumed that quality is near perfect, as is the consumer's expectation. Thus, the camera firms work hard at identifying the key features (that is, functionality) which the consumer desires at each price point. What does the purchaser of the $99 camera really want in terms of features? At the $49 level? This type of competition is characterized by frequent model changes (18 months is the life cycle of products in this industry) and intense efforts to identify consumer desires (Olympus hires sales agents to work in retail camera stores to identify customer preferences, for example).

2-48 (continued -2)

2. A value chain for Olympus Camera Company follows:

STEPS IN THE VALUE CHAIN	ACTIVITIES AT EACH STEP OF THE VALUE CHAIN	EXPECTED OUTPUT OF EACH ACTIVITY
First Step: Acquire raw materials	Purchase from appropriate vendors; maintain effective long-term relationships with the vendors; objectives: flexibility, low cost, and quality.	High quality, low cost parts and materials
Second Step: Assemble materials and parts into components of the camera. Some of the components may be manufactured, while others are purchased outside the firm.	Raw materials are converted to components and parts used in the manufacture of the camera	Desired components and parts
Third Step: Camera Manufacturing	Final assembly, packaging, and shipping the final product	Completed camera
Fourth Step: Wholesaling, Warehousing and Distribution	As needed, move to retail locations and warehouses	Freighter, rail, truck, air
Fifth Step: Retail Sales	Retail sale	
Sixth Step: Customer Service	Process returns, inquiries and repairs	

2-48 (continued -3)

The opportunities for cost reduction/value enhancement include:

redesign to reduce materials cost and to speed the manufacturing process

replace expensive materials with less expensive materials, e.g., metal parts for plastic, effective vendor relationships to reduce costs, improve quality and delivery, etc.

redesign the product to reduce service and warranty costs by making it simpler, more reliable, and easier to use

examine whether certain parts and components could be manufactured or purchased from an outside vendor; choose the low-cost method

improve the efficiency of the manufacturing process, using, for example, the theory of constraints

improve the efficiency of the workforce through training and proper incentives

improve quality as this will lower overall costs

reduce the cost of distributing the product

reduce the complexity of the product, so that it will still meet the desired functionality at the given price point

2-50 Strategy Requirements Under the Baldrige Quality Award Program (30 min)

1. The Baldrige Award Program has a strong emphasis on strategy as evidenced by the emphasis on strategic planning. This topic is given 85 points of the total of 1,000 points awarded in the evaluation of proposals – almost 10% of total points. The section on strategic planning includes two subsections. The first is Strategy Development, worth 40 points. The organization preparing a proposal for the award uses this section to explain the strategy development process in their firms, including the development of strategic objectives, CSFs, and those in the firm who participated in the process.

   The second section, titled "Strategy Deployment," asks the organization to explain how it implements strategy. The topics from this chapter are relevant in this regard.

2. The Baldrige Program should be a good process for a firm not only in developing and revising its strategy, but also in strategy implementation. In particular, each of the four parts of the seventh category, business results, could be considered a perspective of a balanced scorecard for the firm: customer-focused results, financial and market results, human resources, and organizational effectiveness. By examining its own performance in these areas, and by showing how it measures progress in these areas, the organization is doing something very much like a balanced scorecard.

2-52 Strategy; Critical Success Factors; Martial Arts (20 min)

1. George's strategy seems to be a mix of differentiation (customer service, reputation for quality training) and cost leadership (keep prices low, lower than competitors, by locating in strip malls). What do his customers want? For this type of service (as for many types of personal services: personal trainers, hair stylist, etc) it is likely to be the quality of training as a priority, and the cost of the training has to be in line with competitors, but not the primary competitive advantage. This would suggest differentiation should be his strategy, and the pricing should not be a key issue. Rather the focus on selection locations should be the attractiveness and accessibility of the locations to his targeted customer groups.

2. The indicators seem to reflect pretty well what George is after, growth based on customer service. By watching his sales numbers, and the performance of his teachers, he is likely to build the priorities that are important to his business. Some refinement is possible. These indicators can be linked more closely to his strategy by gathering the sales numbers for each location so that the productivity of the different locations can be compared, to facilitate the choice of future locations and evaluate the closing of current locations. Also, the sales data might be gathered by type of course, for the same reason as above. Students are likely to have additional suggestions for measures that would be appropriate for a fast growing company.

   As part of the class discussion, you might ask what the BSC for George's business might look like, and would a BSC be appropriate for the business. Clearly the customer and human resources perspectives would be important to George, as well as the financial perspective. The operations perspective might be useful as well, to track operating costs, traffic or other factors in the vicinity of each location that help or hurt enrollments or customer service, and the like.

2-54 Value-Chain Analysis (20 min)

STEPS IN THE VALUE CHAIN	ACTIVITIES AT EACH STEP OF THE VALUE CHAIN
First Step: Obtaining and maintaining the right to provide public service	Licenses, fees, and compliance with regulatory requirements; obtaining gates at desired airports
Second Step: Marketing and promotion	Advertising, relationships with travel agents, resort chain, etc.
Third Step: Ticketing	Confirmation codes, payment acceptance, seat availability
Fourth Step: Airport operations	Gate activities for arrivals and departures, airport fees, security costs, baggage handling
Fifth Step: Aircraft operations	Maintenance, fueling, fleet operations (including purchase and repair)
Sixth Step: In-flight service	Safety regulation conformance, passenger request satisfaction, equipment functions, food and beverage service

As to adding value and reducing cost, the airlines in recent years have added fees for inboard services and for checked baggage, and for other services which were once free. The added services have increased the profitability of the airlines, while passengers have complained and adapted. There is a much greater volume of carry-on luggage than before the fees were introduced.

To address higher fuel costs, the airlines typically use commodity futures, hedges, and other forms of derivatives to hedge against the increasing price of fuel. This is particularly important in the recent few years as gas prices have become more volatile, and additionally, there appears to be a long-term upward trend in gas prices.

2-54 (continued -1)

<u>Regarding competitive developments in the airline industry:</u>

Recent events in the airline industry indicate the industry as a whole may be moving to a cost leadership position. The bankruptcy of American Air, following that of Delta and United, has positioned the industry to complete as a set of large cost leaders (see, for example: Susan Carey and Jack Nicas, “Rivals Invade Southwest’s Air Space,” *The Wall Street Journal*, December 16, 2011, p. B8). This suggests that throughout the industry, companies will be looking to the value chain for ways to reduce costs.

An interesting case study reported in the *Harvard Business Review* (Loizos Heracleous and Jochen Wirtz, “Singapore Airlines’ Balancing Act,” July-August 2010, pp. 145-149.) shows an example of an airline that appears to be applying both cost leadership and differentiation. Singapore Airlines does this by using target costing and careful investment strategies, so that its expenditures are target very precisely to customer requirements. For example, Singapore Airlines spends a good deal on employee training, knowing that these expenditures have a direct and positive effect on customer satisfaction. The case is explained in the article as a departure from the Michael Porter concept that a firm needs to compete on either cost leadership or differentiation, but not both. The authors note that the “combined competition” is more common in Asian countries. See chapter 13 for a further development of this idea, in Robin Cooper’s study of Japanese companies that, relying on target costing, seemed to be applying simultaneously the cost leadership and differentiation strategies.

In Michael Porter’s earliest writing, he offered the idea of a type of competitive strategy based on finding a “niche,” that is, an area of the industry business that other firm’s neglected or avoided. In the context of airlines, a recent exam fits this “niche” strategy. A small airline, Seaport Airlines, located in Portland, Oregon, succeeds by supplying customer demand for the short flights that the larger airlines have abandoned. It provides service to the smaller cities and towns in Oregon and Washington state. See, Joel Millman, “Tiny Airline Cashes In on Small Cities,” *The Wall Street Journal,* January 25, 2012, p. B10.

2-56 Strategy; Value Chain; Harley-Davidson (15 min)

The Rider’s Edge program fits best near the end of Harley-Davidson’s value chain, near to the customer. In this program the firm provides a customer service that is unique in the industry, and potentially an important way to attract new customers. Moreover, the program can be an important new source of income for Harley-Davidson. As new riders, and perhaps some of the veterans, find they can improve their cycling skills, the program could become a popular and a significant source of new income for the firm.

The women’s program fits both the upstream and downstream ends of the HD value chain. The program involves both a design approach to develop a product for women, and also a customer service effort involving the magazine and other programs directed to increase the interest of women in the product.

Both programs fit the HD strategy of broadening its customer base beyond the loyal but dwindling HD customer base.

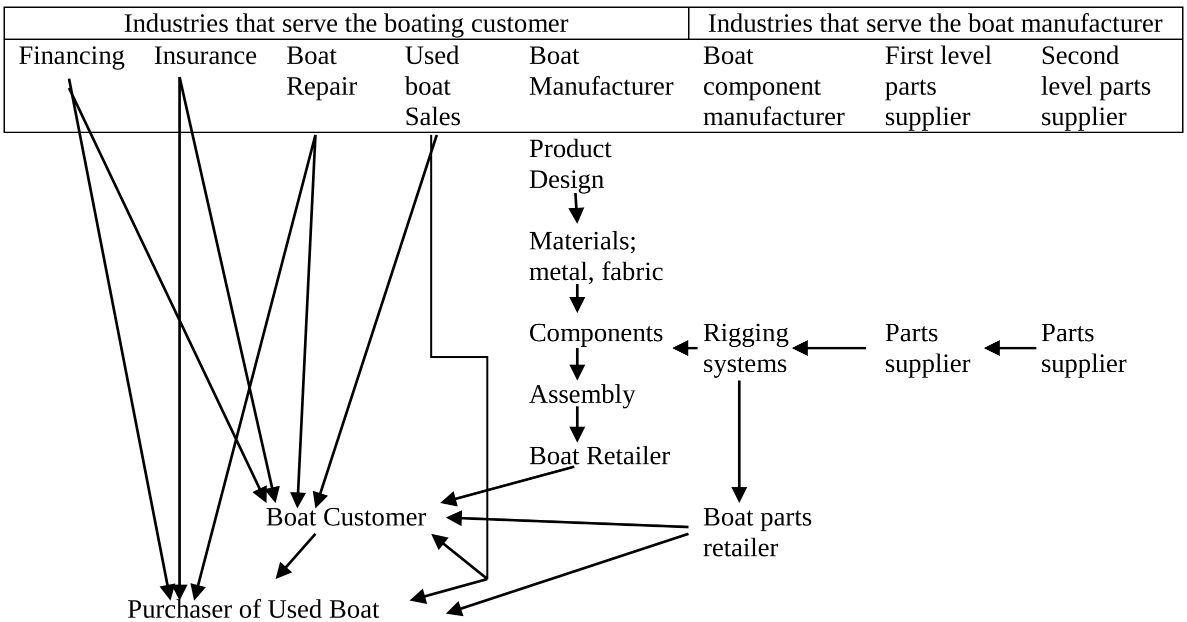
Another aspect of value chain for HD is its financing unit. As for many manufacturers, including the auto companies, General Electric, and the large software firms such as Oracle, Harley-Davidson has a finance unit that finances the sale of its motorcycles for many of its customers. As for many companies, the finance unit can be a source of profit; sometimes the finance unit is more profitable than the sales unit, as in the case in recent years in the domestic auto industry. However, while the decline in the economy during 2008 left Harley-Davidson and its finance unit struggling in the fall of 2008, both the sales and financing sides of the business are profitable in July 2011.

Source: James R. Hagerty, “Harley, With Macho Intact, Tries to Court More Women,” *The Wall Street Journal*, October 31, 2011, p B1’ “Harley Shows Its Feminine Side,” *Bloomberg Businessweek*, October 4, 2010, p 25; James R. Hagerty, “Harley Roars On U.S. Rebound,” *The Wall Street*

Journal, July 20, 2011, p B4; "Harley Just Keeps on Cruisin'," *Business Week*, November 6, 2006, p 71-72.

2-58 Value Chain: Multiple Industries (20 min)

An example for the boating industry is shown below, and is taken directly from the example in the text.



2-60 Foreign Exchange Rates (20 min)

1. For 2008 through January 2012, many Asian currencies have been generally stable relative to the U.S.$, particularly the Korean won, India's rupee and Taiwan' dollars. The Chinese Yuan was slowly appreciating relative to the dollar during the period as was Japan's yen. The New Zealand and Australian currencies were also increasing in value relative to the dollar during this period.

   The generally stable exchange rates in the Asian countries (except Japan, Australia, and New Zealand) are favorable for manufacturers such as General Motors, making it simpler to manage its global sales and product sourcing operations. It also removes the uncertainty about exchange rate fluctuations that might have a damaging effect on consumer confidence in these countries. For countries where the dollar is falling, General Motors' products become more competitive abroad, while the products of its Asian competitors become less price competitive in the U.S.

2. Since falling against the dollar in late 2008, the Euro rose against the dollar in mid-2009 and since then has fluctuated less than 5% up and down versus the U.S. dollar into early 2012.The fall in the dollar against the Euro helps U.S. companies as the effective cost of U.S. products and services fall in the Euro countries. A retailer such as Walmart benefits potentially in two ways: (1) sales in Euro countries are converted to U.S. dollars at a higher rate, resulting in exchange rate gains, (2) to the extent that Walmart products are made in the U.S., these products become more price –competitive and thus more attractive to the Euro-country consumer. The changing exchange rates would affect Walmart's value chain analysis; For Walmart there is the trade-off between the low-cost U.S. supplier versus the cost of transporting the product to its global markets. The overall effect on Walmart might be a shift in sources of supply and an increase in transportation costs.

2-60 (continued -1)

3. Mexico's peso, stable relative to the U.S. $; Canadian dollar also relatively stable to the U.S.$

   These relatively stable exchange rates support, in part, the strong trade relationships among these countries. Ford Motor Company benefits through its ability to purchase parts and components for its vehicle from low-cost suppliers in Mexico, and to sell its products throughout the region under the terms of the NAFTA agreement. The down-side for U.S. job seekers is that the agreement has resulted in some jobs moving to these other countries. A debate about the benefits and costs of free trade is beyond the scope of this question, but the instructor can touch on some of the issues that are involved, and the role that currency fluctuations can play. For example, a falling dollar relative to these currencies would make the decision to outsource parts production to these countriesless attractive for a U.S. firm, because the foreign product would be more expensive.

   See Also: Chana R. Schoenberger, "Weak Dollar Boosting Quarterly Earnings," *The Wall Street Journal*, May 4, 2011, p B7; James R. Hagerty, "A Falling Dollar Pushes Exports, Draws Risks," *The Wall Street Journal*, July 11, 2011, p A2; William Kazer and Andrew Browne, "China Moves in to Calm Market's Nerves," *The Wall Street Journal*, August 12, 2011, p A10.

2-62 Research Assignment; Sustainability (30 min)

1. The three options are:
    a. Adding a fifth perspective to the BSC
    b. Developing a separate sustainability balanced scorecard
    c. Integrating the measures throughout the four perspectives: financial, customer, internal business processes, and learning and growth.

    As noted in the chapter, all of these are common. Nike and Ford Motor use a combination of (b) and (c), while Shell and Exxon-Mobil use (b), and many software vendors such as SAS and Oracle offer software that provides either (a), (b) or (c).

    The article notes that approach (a) might not provide the amount of visibility for sustainability efforts that firms such as Ford, Shell and Nike are looking for. So for these firms, a separate scorecard is more desirable. For other firms, that wish to show a comprehensive single BSC, approach (a) works well since it puts all of the firms goals in a single, comprehensive system.

2. The seven BSC measurement selection considerations for a sustainability scorecard are:
    a. There is an underlying objective for the measurement. That is, the measure reflects an important goal for the company.
    b. Measurement terminology is defined and used consistently throughout the organization. This step provides the needed comparability, so that measures from different units within the firm can be compared usefully.
    c. Information needed for the measurement is obtainable. This consideration makes it clear that the BSC requires a quantitative metric, not a qualitative statement. Moreover, the measures should be reliable and produced from a system that can be audited to insure the accuracy of the information.
    d. The measurement will create behavior that is in agreement with the organizational goals and objectives. This means that the measures are chosen based upon the strategy, goals, and objectives of the firm. As for other elements of the BSC, all of the sustainability measures can be linked to strategy and goals.

2-62 (continued -1)

e. While there will likely be a combination of lagging and leading indicators, leading indicators are more appropriate to help predict how the organization will perform in the future. Likely a
f. firm will choose to use a combination of both leading and lagging indicators.
g. The measurements should be used to track performance trends. The comparisons can be both trends, and where appropriate, comparisons across units within the firm.
h. Appropriate benchmarks and targets are set.