Chapter 2
Implementing Strategy: The Value Chain, the Balanced Scorecard, and the Strategy Map

Learning Objectives

1. Explain how to implement a competitive strategy by using Strengths-Weaknesses-Opportunities-Threats (SWOT) Analysis
2. Explain how to implement a competitive strategy by focusing on the execution of goals.
3. Explain how to implement a competitive strategy using value-chain analysis.
4. Explain how to implement a competitive strategy using the balanced scorecard and strategy map.
5. Explain how to expand the balanced scorecard by integrating sustainability.

New in this Edition

- All Real World Focus items are revised and updated, particularly the item on the currency fluctuation; one new Real World Focus item on execution; real world information throughout the chapter is revised for current information
- New Cost Management in Action item on strategy in consumer electronics – Apple vs. Samsung
- The section on Execution is updated and enhanced
- Twelve new Brief Exercises, three new problems, and several revised exercises and problems

Teaching Suggestions

This chapter is unique, and is not included in most cost and management accounting textbooks. Because of the importance of the strategic theme of the book, this entire chapter is devoted to developing the three key areas of strategy implementation. The chapter follows the introduction to strategy in chapter 1, which we view as a foundational topic, as is ethics, and is thus included in the first chapter. Chapter two develops the strategic emphasis by explaining the methods in which it is implemented in organizations.

1) **strategy execution,** including the development of critical success factors and SWOT (strengths, weaknesses, opportunities, threats) analysis.
2) **the value chain**, this chapter takes the perspective of the industry-level value chain, as explained by John Shank in a number of his publications, in contrast to the firm-level concept as developed by Michael Porter. Shank's concept has greater generality and is more useful for cost management.
3) **the balanced scorecard**, a concept developed by Robert Kaplan and David Norton, which includes nonfinancial as well as financial data in providing a broad, balanced evaluation of the firm and its managers.
4) **Sustainability,** the adaptation of the balanced scorecard or the development of an independent scorecard to measure the organization's effectiveness in achieving social and environmental goals as well as financial goals.

For the value chain. I pick a simple example and show it on the board or transparency. Then I ask the class to help develop a value chain for a similar type of firm. Some students will at first find the concept of the value chain too vague, and they are concerned how they will do homework problems and/or exam questions. For this reason, I try to emphasize simple and familiar examples at first, for example, student organizations or the student book store. Also, I emphasize the ***use*** of value chains more so than the development of value chains. I do not require the students to complete a value chain on an exam, though I have presented a completed value chain and asked for their interpretation of it—what it suggests about how the firm can increase value for the customer or streamline operations and reduce cost.

The balanced scorecard is best presented by example, and is usually very quickly understood by the students. Occasionally, I have added to this discussion the use of a case, such as the Analog Devices case (Robert Kaplan, Harvard Business School). I also find useful the article by Chow, Haddad, and Williamson, "Applying the Balanced Scorecard to Small Companies" (*Management Accounting*, August 1997, pp 21-27). The article shows the balanced scorecards for four different firms. The article gives me a way to lead a class discussion on both (1) how the scorecard reflects the firm's competitive strategy, and (2) how the scorecard differs among firms and industries.

An important point to convey in this chapter is that cost management must be based on a strategic competitive assessment of the firm. That is, in order to develop effective cost management methods, it is necessary to know how the firm competes, and how it is successful. The methods to be developed will depend on this. If the firm is a cost leadership competitor, the choice of cost management methods will be different than if the firm is a differentiator.

A related point is that the students must understand at this point that what they will see later in the course, whether it be the master budget, the flexible budget, or productivity analysis, etc, must be viewed within the context of how it helps the firm advance its strategy and become more successful. None of the topics are covered simply because this topic or method is used in practice. Rather, each topic is considered from the standpoint: how will this method help the firm succeed?

Assignment Matrix Chapter 2 Exercises and Problems					Learning Objectives					Text Features				
7e	6e	Transition 6e to 7e	Time	Connect	1. Using SWOT Analysis	2. Execution of Goals	3. Value chain analysis	4. Balanced scorecard amd strategy map	5. Integrating sustainability	Strategy	Service	International	Ethics	Sustainability
Brief Exercises														
2-18	2-18		5 min.		X									
2-19	2-19		5 min.		X									
2-20	2-20		5 min.				X							
2-21	2-21		5 min.					X						
2-22	2-22		5 min.				X							
2-23	2-23		5 min.				X							
2-24	2-24		5 min.					X						
2-25	2-25		5 min.					X						
2-26	2-26		5 min.					X		X				
2-27	2-27		5 min.					X		X				
2-28		New in 7e	5 min.	X	X					X				
2-29		New in 7e	5 min.	X		X				X				
2-30		New in 7e	5 min.	X				X		X				
2-31		New in 7e	5 min.	X					X					X
2-32		New in 7e	5 min.	X				X						
2-33		New in 7e	5 min.	X				X		X				
2-34		New in 7e	5 min.	X	X									
2-35		New in 7e	5 min.	X			X							
2-36		New in 7e	5 min.	X	X									
2-37		New in 7e	5 min.	X	X									
2-38		New in 7e	5 min.	X					X					X
2-39		New in 7e	5 min.	X			X							
Exercises														
2-40	2-28		20 min.		X	X	X	X		X				
	2-29	Deleted												
2-41	2-30	Revised	15 min.				X					X		
2-42	2-31		15 min.				X	X			X	X		
2-43	2-32		15 min.				X		X		X			X
2-44	2-33		15 min.						X	X				X
2-45	2-34		15 min.						X				X	X
Problems														
2-46	2-35		25 min.			X		X		X	X			
2-47	2-36		20 min.			X				X				
2-48	2-37		20 min.		X									
2-49	2-38		20 min.				X							
2-50	2-39		20 min.					X						
2-51	2-40		20 min.			X				X				
2-52	2-41		20 min.		X									
2-53	2-42		30 min.				X							
2-54	2-43		20 min.					X						

Continued on next page…

Assignment Matrix Chapter 2 Exercises and Problems (continued)					Learning Objectives					Text Features				
7e	6e	Transition 6e to 7e	Time	Connect	1. Using SWOT Analysis	2. Execution of Goals	3. Value chain analysis	4. Balanced scorecard amd strategy map	5. Integrating sustainability	Strategy	Service	International	Ethics	Sustainability
		Problems (continued)												
2-55	2-44		20 min.			X		X		X				
2-56	2-45		25 min.			X		X		X				
	2-46	Deleted												
2-57	2-47		45 min.			X				X	X			
	2-48	Deleted												
2-58	2-49		40-50 min.			X	X	X		X				
2-59	2-50	Revised	30 min.			X		X		X				
2-60	2-51		40-50 min.			X		X	X				X	X
2-61	2-52		20 min.			X				X				
2-62	2-53		20 min.			X		X		X				
	2-54	Deleted												
2-63	2-55		30 min.			X	X							
2-64	2-56		15 min.			X	X							
	2-57	Deleted												
2-65		New in 7e	20 min.					X		X	X	X		
2-66		New in 7e	10 min.				X							
2-67	2-58		40 min.				X							
2-68	2-59		40 min.				X							
2-69	2-60	Revised	20 min.				X					X		
2-70	2-61		30 min.				X			X				
2-71		New in 7e	20 min.						X					X
2-72	2-62		So min.					X	X					X

Lecture Notes

A. How a Firm Succeeds: The Competitive Strategy. It is useful to reinforce in chapter two the basic concepts of strategy, using the Michael Porter framework introduced in chapter 1. A firm succeeds by finding a sustainable strategy, which is a set of policies, procedures, and approaches to business to produce long-term success. Finding a strategy begins with determining the purpose, long-range direction, and mission of the company. The mission statement is developed into specific performance objectives, which are then implemented by specific corporate actions. Firms are beginning to use cost management in a new management-facilitating role, in order to support their strategic goals. A modern cost accounting system must be more dynamic than before, to deal with the rapidly changing environment.

Strategic Measures of Success. The strategic cost management system develops both financial and non-financial strategic information. The financial measures (like earnings and cash flow) show the impact of the firm's policies on the firm's current financial position. Conversely, nonfinancial factors (such as market share and customer satisfaction) show the firm's current and potential competitive position. Strategic financial and nonfinancial measures of success are commonly called critical success factors (CSFs).

B. Critical Success Factors and SWOT Analysis.

SWOT analysis is a systematic procedure for identifying a firm's CSFs: its internal **S**trengths and **W**eaknesses and its external **O**pportunities and **T**hreats. Strengths are skills and resources that the firm has more abundantly than other firms. Skills or competencies that the firm employs especially well are called core competencies. Core competencies are important because they point to areas of significant competitive advantage for the firm; core competencies can be used as the building blocks of the firm's overall strategy. In contrast, weaknesses represent a lack of important skills or competencies relative to presence of those resources in competing firms. Strengths and weaknesses are most easily identified by looking inside the firm at its specific resources (product lines, marketing, management, strategy, R&D, and manufacturing).

Opportunities and threats are identified by looking outside the firm. Opportunities are important favorable situations in the firm's environment (demographic trends, technological changes). Conversely, threats are major unfavorable situations in the firm's environment (new competitors, government regulations). Opportunities and threats can be identified most easily by analyzing the industry and the firm's competitors (barriers to entry, rivalry intensity, substitute products, customers' bargaining power, and suppliers' bargaining power). The ultimate objectives of the SWOT analysis are to identify the overall strategy and the CSFs of the firm and to begin to develop a consensus among executives and managers regarding them.

C. **Execution**. No matter how carefully crafted the firm's strategy, success will not be achieved without disciplined efforts at execution. A number of CEOs indicate that a good strategy is worthless without effective execution.

D. Cost, Quality, and Time. Many firms find that a consideration of critical success factors yields a renewed focus on the three key factors: cost, quality, and speed of product development and product delivery. Increasingly, firms find that they must compete effectively on each of these three factors. Suppliers to these firms expect to meet very high standards of quality and to meet increasingly demanding delivery terms.

E. Value-Chain Analysis. Value-chain analysis is a strategic analysis tool used to better understand the firm's competitive advantage, to identify where value to customers can be increased or costs reduced, and to better understand the firm's linkages with suppliers, customers, and other firms. The activities of the value-chain include all steps necessary to provide a competitive product or service to the customer. Although the value-chains are sometimes difficult to describe for a service or not-for-profit organization because they might have no physical flow to visualize, the approach is applied to all types of firms. The term value-chain is used because each activity is intended to add value to the product or service. Management can better understand the firm's competitive advantage by separating its operations according to activity. The underlying concept of the analysis is that each firm occupies a selected part or parts of the entire value chain. The determination of which part or parts of the chain to occupy is a strategic analysis based on the consideration of comparative advantage for the firm. Value-chain analysis has three steps:

a. Identify the Value-Chain Activities. The firm identifies the specific value activities that the firm in the industry must perform in the process of designing, manufacturing, and providing customer service. Some firms are involved in a single activity or a subset of the total activities. The activities should be determined at a relatively detailed level of operations, that is, at the level of business unit or process just large enough to be managed as a separate business activity.

b. Identify the Cost Driver(s) at Each Value Activity. A cost driver is any factor that changes the level of total cost. The objective of this step is to identify activities for which the firm has a current or potential cost advantage.

c. Develop a Competitive Advantage by Reducing Cost or Adding Value. In this step, the firm determines the nature of its current and potential competitive advantages by studying the value activities and cost drivers identifies earlier. In doing so, the firm must consider the following:

<u>Identify competitive advantage (cost leadership or differentiation)</u>. The analysis of value activities can help better understand the firm's strategic competitive advantage and its proper positioning in the overall industry value chain.

<u>Identify opportunities for added value</u>. The analysis of value activities can help identify activities in which the firm can add significant value for the customer.

<u>Identify opportunities for reduced cost</u>. A study of its value activities and cost drivers can help a firm determine those parts of the value chain for which it is not competitive.

<u>Exploit linkages among activities in the value chain</u>. The decision to provide an activity internally or to outsource it is sometimes influenced by the way that activity is affected by another activity in the chain.

Value-chain analysis supports the firm's strategic competitive advantage by facilitating the discovery of opportunities for adding value for the customer and/or by reducing the cost to provide the product or service.

F. The Five Steps of Strategic Decision Making for CIC Manufacturing

The five steps of strategic decision making are illustrated in chapter two with an example of value chain analysis. The example is developed in the text, and the five steps are highlighted as follows. The context is a company (CIC) that manufactures computers and competes on a differentiation strategy.

1. **Determine the Strategic Issues Surrounding the Problem.**
   CIC competes as a differentiator based on customer service, product innovation and reliability; customers pay more for the product as a result.
2. **Identify the Alternative Actions:**
   CIC faces two decisions, the first of which is to make or buy certain parts, which CIC currently buys for $300 but CIC could manufacture these parts for $ 190 per unit plus an additional $55,000 monthly cost.
   The second decision is choose whether to continue marketing, distributing, and serving its products, or to outsource that set of activities to JBM enterprises for $130 per unit sold and save $175,000 per month in materials and labor costs.
3. **Obtain Information and Conduct Analyses of the Alternatives**
   First decision: CIC calculates that the monthly cost to buy is $180,000 (=600 x $300) while the monthly cost to manufacture the part is only $169,000 (=600 x $190 + $55,000), a saving of $11,000 to make.
   Second decision: CIC calculates that the monthly cost of the contract with JBM enterprises would be $78,000 (=600 x $130) per month. This is a $97,000 saving over the in-house cost of $175,000 per month.

4. **Based on Strategy and Analysis, Choose and Implement the Desired Alternative**
   First decision: As a differentiator based on product quality and innovation, CIC considers the importance of the quality of the part in question, and decides to manufacture the part. Note that while this would save CIC $11,000 per month, the key reason for the decision is to control the quality of the part and thereby improve overall quality, and support the firm's differentiation strategy. Note however, that if CIC believes that the supplier can provide the part at a higher level of quality than can CIC, the better strategy is reversed; it is now better to continue to buy, even if the costs are higher, in order to support quality, a critical success factor.
   Second decision: As a differentiator based on customer service, CIC considers the continued high level of service from in-house personnel as critical to the company's success and continues to maintain these personnel, even if it means the loss of monthly savings of $97,000.

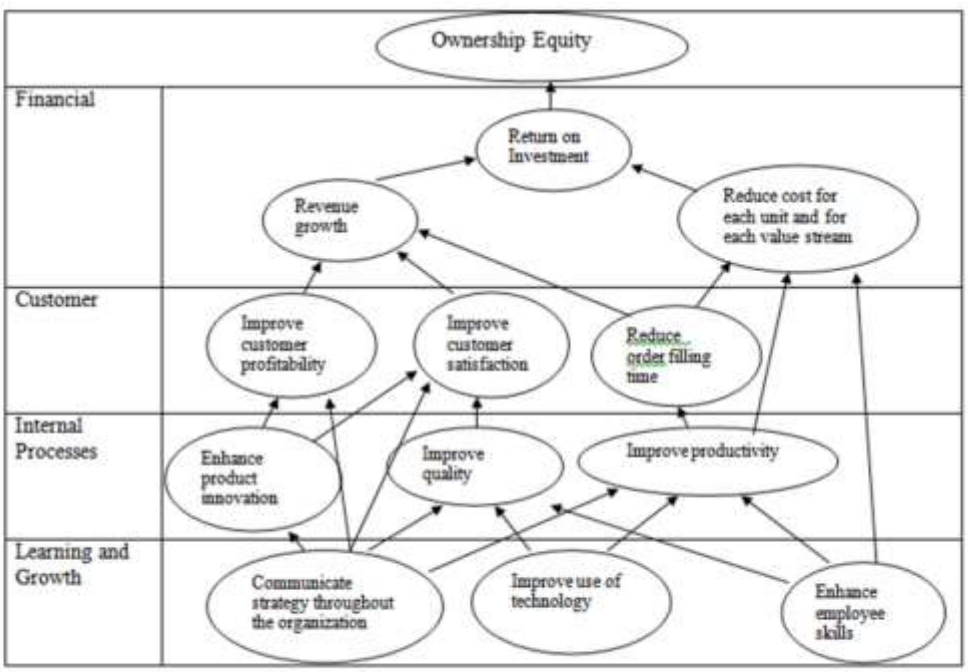
5. **Provide an On-going Evaluation of the Effectiveness of implementation in Step 4.**
   Management of CIC realize that the quality of the product and of customer service is critical to the company's success. So, CIC will continue to review the quality of product and service provided internally. If the quality of the part purchased outside, or the service provided internally is inferior to that provided by JBM, then a change to JBM would be desirable.

G. The balanced scorecard (BSC), a performance report based on a broad set of both financial and non-financial measures, is a crucial part of the firm's efforts to better understand and to implement its strategy. It consists of four "perspectives," or groupings of critical success factors: (1) the *financial perspective* which includes the financial performance measures such as operating income and cash flow, (2) *customer* *perspective*, including measures of customer satisfaction, (3) *internal process perspective*, which includes measures of productivity, speed, among others, and (4*) learning and innovation,* which includes such measures as employee training hours, number of new patents or new products. The BSC provides four key benefits:

- it provides a *means for implementing strategy*, by drawing managers attention to strategically-relevant critical success factors, and rewarding them for achievement on these factors
- it provides a framework for the firm to *achieve a desired organizational change in strategy*, by drawing attention to and rewarding achievement on factors that are part of a new strategy; the BSC makes the nature and direction of the desired change clear to all
- it provides a fair and objective basis for determining each manager's compensation and advancement
- it provides a framework for coordinating efforts within the firm for achieving critical success factors; each manager is able to see how their activity contributes to the success of others.

The BSC can be viewed as a two-way street. Since it is designed to help implement strategy, it also should reflect strategy. One should be able to infer a firm's strategy by a careful study of the firm's BSC.

A **strategy map** is a cause-and- effect diagram of the relationships among the BSC perspectives. It is used to show how the achievement of CSFs in each perspective affect the achievement of goals in other perspectives, and finally the overall financial performance of the firm. An illustration of a strategy map taken from the chapter follows:



H. Expanding The Balanced Scorecard: Sustainability

More and more large companies, especially those in the extractive industries, are concerned about the **sustainability** of their business, that is, the balancing of short and long term goals in all three dimensions of the company's performance – economic, social and environmental. Economic performance is measured in traditional ways, while social performance relates to health and safety of employees and other stakeholders, while the environmental dimension refers to the impact of the firm's operations on the environment.

The CSFs in a sustainability perspective are called environmental performance indicators (EPIs), which are defined in three categories by the World Resources Institute:

- operational indicators; measure potential stresses to the environment, for example, fossil fuel use
- management indicators; measure efforts to reduce environmental effects, for example, hours of environmental training,
- environmental condition indicators; measure environmental quality, for example, ambient air pollution concentrations