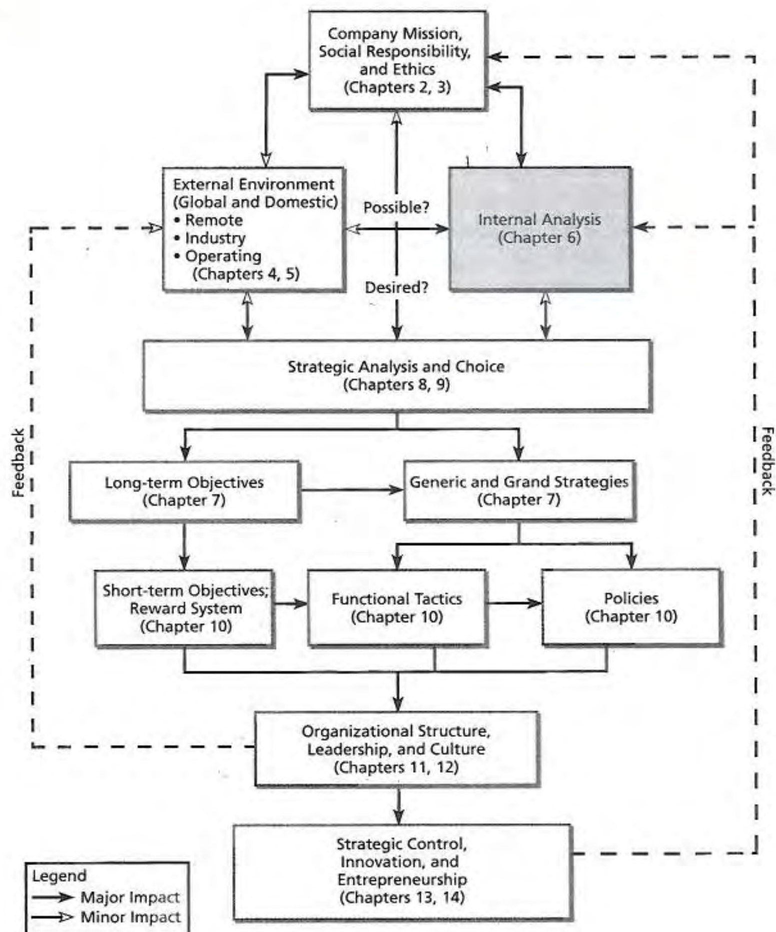
Chapter Six

Internal Analysis

After reading and studying this chapter, you should be able to

1. Understand how to conduct a SWOT analysis, and be able to summarize its limitations.
2. Understand value chain analysis and how to use it to disaggregate a firm's activities and determine which are most critical to generating competitive advantage.
3. Understand the resource-based view of a firm and how to use it to disaggregate a firm's activities and resources to determine which resources are best used to build competitive advantage.
4. Apply four different perspectives for making meaningful comparisons to assess a firm's internal strengths and weaknesses.
5. Refamiliarize yourself with ratio analysis and basic techniques of financial analysis to assist you in doing internal analysis to identify a firm's strengths and weaknesses.



The late R. David Thomas was once ridiculed by many restaurant industry veterans and analysts as he set about building "yet another" hamburger chain named after his young daughter, Wendy. While they thought the name was fine, critics argued that North America was already saturated with hamburger outlets such as McDonald's, Burger King, Hardees, Dairy Queen, White Castle, and others. Yet, as things turned out, Wendy's became the fastest-growing restaurant chain in the history of the world, having replaced Burger King as the second largest chain. Cisco, the global leader in networking equipment and switching devices linking wired and wireless computer systems worldwide, twice entered and tried to dominate the home-networking market. It failed each time, wasting more than $250 million in the process. Finally, just a few years ago, it acquired Linksys, the market leader, with the promise it would never try to bring Linksys into the normal Cisco company structure for fear of destroying the extraordinary success Linksys had achieved—not the least of which was vanquishing the much more powerful and wealthy Cisco twice in the last decade. Apple Computer was being written off in the increasingly competitive personal computer industry when it introduced, to a lukewarm reception, its new iPod device and iTunes service. Written off by many as a cute fad, that modest start pioneered a vast new global industry—much like Apple's original personal computer did three decades earlier.

Common to each of these diverse settings were insightful managers and business leaders who based their firm's pursuit of market opportunities not only on the existence of external opportunities but also on a very sound awareness of their firm's competitive advantages arising from the firm's internal resources, capabilities, and skills. A *sound, realistic awareness and appreciation of their firm's internally generated advantages* brought Wendy's, Apple, and Linksys immense success while its absence brought much the opposite to Cisco's home-networking ventures and to the competitors and critics of R. David Thomas and Steven Jobs. This chapter, then, focuses on how managers identify the key resources and capabilities around which to build successful strategies.

Managers often do this subjectively, based on intuition and "gut feel." Years of seasoned industry experience positions managers to make sound subjective judgments. But just as often, or more often, this may not be the case. In fast-changing environments, reliance on past experiences can cause management myopia—or a tendency to accept the status quo and disregard signals that change is needed. And with managers new to strategic decision making, subjective decisions are particularly suspect. A lack of experience is easily replaced by emotion, narrow functional expertise, and the opinions of others, thus creating the foundation on which newer managers build strategic recommendations. So it is that new managers' subjective assessments often come back to haunt them.

John W. Henry broke the most fabled curse in sports when his Boston Red Sox won their first World Championship since 1918. Most sports analysts, sports business managers, and regular fans (if they are honest now) would have bet a small fortune, based on their own subjective assessment, that there was no way the Boston Red Sox, having already lost three games, would win four straight games to beat the New York Yankees and then go on to win the World Series. That subjective assessment or "feel" would have led them to believe there were just too many reasons to bet the Red Sox could pull it out. At the same time, a seasoned global futures market trader, John W. Henry, relied on applying his systematic global futures market approach to baseball player selection along with selected other resources and capabilities unique to the Boston area and situation in his bet that the Red Sox could win it all. His very systematic approach to internal analysis of the Boston Red Sox sports enterprise and the leveraging of his/their strengths led to the World Series championship and perhaps many more, as described in Exhibit 6.1, Top Strategist.

Managers often start their internal analysis with questions like, How well is the current strategy working? What is our current situation? Or what are our strengths and weaknesses? The chapter begins with a review of a long-standing, traditional approach

Top Strategist

John W. Henry, CEO of the Boston Red Sox

Exhibit 6.1

John W. Henry, CEO of the Boston Red Sox, and Slugger David Ortiz

The return of pain and broken hearts for every Boston Red Sox fan with each new professional baseball season was legendary. Not since 1918 had they experienced winning the World Series, yet they had suffered through their arch nemesis, the New York Yankees, doing it 26 times over that lengthy spell. But something happened in the new millennium, and suddenly in 2004 and again in 2007 sports best-known curse was broken after almost a century of trying—the Boston Red Sox won two World Series titles.

It could not have happened in a more dramatic fashion. The Red Sox were down three games to none in the American League Championship series, once again, to the hated New York Yankees . . . and playing in New York for the deciding Game 4. Somehow, the Red Sox rallied to win that game, and then the next three, allowing them to go to the World Series. They won that too. Since then, the Sox have won another and are now in the championship hunt each year. What happened? John W. Henry became co-owner and CEO a few years before that initial win, and he took a different approach to charting the Red Sox's future. He may well have achieved immortality, at least in the Red Sox nation.

Henry set about a careful, internal analysis to determine the Red Sox's skills, resources, capabilities, and weaknesses. He set the tone by firing the manager during the 2003 playoff series for what he thought was a critical, poor decision in a decisive game. That set a tone of seriousness—and gained fan support. Henry had previously earned his fortune developing and building a business around his proprietary global futures trading system still widely used today. So he secondly approached internal assessments of the Red Sox player possibilities in a similar manner—he used a system called *sabermetrics* to mine baseball statistics about minor league and other young players, systematically finding undervalued players to bring into the Red Sox organization while also identifying when to avoid long-term contracts with aging stars.*

He further saw other underutilized capabilities, such as generating more revenue from Fenway Park, the oldest stadium in Major League Baseball, by squeezing in more seats and then charging the highest prices for home games. They always sold out. He started high-definition (HD) broadcasts of home games on their 80 percent–owned New England Sports Cable Network, broadening the fan base, increasing advertising revenue, and routinely winning regional prime-time ratings. The Red Sox quickly turned into the second-highest-earning MLB franchise, giving it the financial muscle to compete with the perennial highest payroll Yankees.

New York Times writer George Vecsey said about the Yankees: "They are becoming the Red Sox of old—25 players and a bunch of separate cabs." The Sox organization, led by Henry, has become a team of players, who get along, hang out, and play together. It all started with Henry's objective internal analysis, and he's now aiming for a dynasty.**

* "John Henry: Boston Red Sox," *BusinessWeek*, January 10, 2005.

** "Sports of the Times: Epstein to Red Sox Fans: This One's for You," *New York Times*, October 22, 2004.

managers have frequently used to answer these questions, SWOT analysis. This approach is a logical framework intended to help managers thoughtfully consider their company's internal capabilities and use the results to shape strategic options. Its value and continued use is found in its simplicity. At the same time, SWOT analysis has limitations that have led strategists to seek more comprehensive frameworks for conducting internal analysis.

Value chain analysis is one such framework. Value chain analysis views a firm as a "chain" or sequential process of value-creating activities. The sum of all of these activities represents the "value" the firm exists to provide its customers. So undertaking an internal analysis that breaks down the firm into these distinct value activities allows for a detailed, interrelated evaluation of a firm's internal strengths and weaknesses that improves upon what strategists can create using only SWOT analysis.

The resource-based view (RBV) of a firm is another important framework for conducting internal analysis. This approach improves upon SWOT analysis by examining a variety of different yet specific types of resources and capabilities any firm possesses and then evaluating the degree to which they become the basis for sustained competitive advantage based on industry and competitive considerations. In so doing, it provides a disciplined approach to internal analysis.

Common to all the approaches to internal analysis is the use of meaningful standards for comparison in internal analysis. We conclude this chapter by examining how managers use past performance, comparison with competitors or other "benchmarks," industry norms, and traditional financial analysis to make meaningful comparisons.

SWOT ANALYSIS: A TRADITIONAL APPROACH TO INTERNAL ANALYSIS

SWOT analysis
SWOT is an acronym for the internal Strengths and Weaknesses of a firm, and the environmental Opportunities and Threats facing that firm. SWOT analysis is a technique through which managers create a quick overview of a company's strategic situation.

SWOT is an acronym for the internal **S**trengths and **W**eaknesses of a firm and the environmental **O**pportunities and **T**hreats facing that firm. **SWOT analysis** is a historically popular technique through which managers create a quick overview of a company's strategic situation. It is based on the assumption that an effective strategy derives from a sound "fit" between a firm's internal resources (strengths and weaknesses) and its external situation (opportunities and threats). A good fit maximizes a firm's strengths and opportunities and minimizes its weaknesses and threats. Accurately applied, this simple assumption has sound, insightful implications for the design of a successful strategy.

Environmental and industry analysis in Chapters 3 and 4 provides the information needed to identify opportunities and threats in a firm's environment, the first fundamental focus in SWOT analysis.

Opportunities

opportunity
A major favorable situation in a firm's environment.

An **opportunity** is a major favorable situation in a firm's environment. Key trends are one source of opportunities. Identification of a previously overlooked market segment, changes in competitive or regulatory circumstances, technological changes, and improved buyer or supplier relationships could represent opportunities for the firm. Sustained, growing interest in organic foods has created an opportunity that is a critical factor shaping strategic decisions at groceries and restaurants worldwide.

Threats

threat
A major unfavorable situation in a firm's environment.

A **threat** is a major unfavorable situation in a firm's environment. Threats are key impediments to the firm's current or desired position. The entrance of new competitors, slow market growth, increased bargaining power of key buyers or suppliers, technological changes, and new or revised regulations could represent threats to a firm's success. The move by

Nokia to bundle free, unlimited music downloads for one year with its new Nokia phones has created a major new development in the digital-music-service market—heretofore essentially legitimized and dominated by Apple's iTunes. Nokia is one of the few global companies with the device capability and the muscle to challenge iTunes' domination of this global market. While Apple has a trinity—the iPhone, iPod, and iTunes—which most would say is a dominating strength, this move by Nokia must be considered a serious "threat" by Apple's management as they use a SWOT analysis to help them assess internal capabilities and craft a future iTunes' strategy.

Once managers agree on key opportunities and threats facing their firm, they have a frame of reference or context from which to evaluate their firm's ability to take advantage of opportunities and minimize the effect of key threats. And vice versa: once managers agree on their firm's core strengths and weaknesses, they can logically move to consider opportunities that best leverage their firm's strengths while minimizing the effect certain weaknesses may present until remedied.

Strengths

strength
A resource advantage relative to competitors and the needs of the markets a firm serves or expects to serve.

A **strength** is a resource or capability controlled by or available to a firm that gives it an advantage relative to its competitors in meeting the needs of the customers it serves. Strengths arise from the resources and competencies available to the firm. Southland Log Homes' southeastern plant locations (Virginia, South Carolina, and Mississippi) provide both transportation and raw material cost advantages along with ideal proximity to the United States' most rapidly growing second-home markets. Southland leveraged these strengths to take advantage of the moderate interest rates and rapidly growing baby-boomer second-home demand trend to become one of the largest log home companies in North America. This strength has continued to sustain Southland even as it navigates the recent economic depression in the U.S. housing market.[1]

Weaknesses

weakness
A limitation or deficiency in one or more resources or competencies relative to competitors that impedes a firm's effective performance.

A **weakness** is a limitation or deficiency in one or more of a firm's resources or capabilities relative to its competitors that create a disadvantage in effectively meeting customer needs. Limited financial capacity was a weakness recognized by Southwest Airlines, which charted a selective route expansion strategy to build the best profit record in a deregulated airline industry.

Using SWOT Analysis in Strategic Analysis

The most common use of SWOT analysis is as a logical framework guiding discussion and reflection about a firm's situation and basic alternatives. This often takes place as a series of managerial group discussions. What one manager sees as an opportunity, another may see as a potential threat. Likewise, a strength to one manager may be a weakness to another. The SWOT framework provides an organized basis for insightful discussion and information sharing, which may improve the quality of choices and decisions managers subsequently make. Consider what initial discussions among Apple Computer's management team might have been that led to the decision to pursue the rapid development and introduction of the iPod. A brief SWOT analysis of their situation might have identified:

Strengths

Sizable miniature storage expertise
User-friendly engineering skill

[1] www.SouthlandLogHomes.com

Reputation and image with youthful consumers
Brand name
Web-savvy organization and people
Jobs's Pixar experience

Weaknesses

Economies of scale versus computer rivals
Maturing computer markets
Limited financial resources
Limited music industry expertise

Opportunities

Confused online music situation
Emerging file-sharing restrictions
Few core computer-related opportunities
Digitalization of movies and music

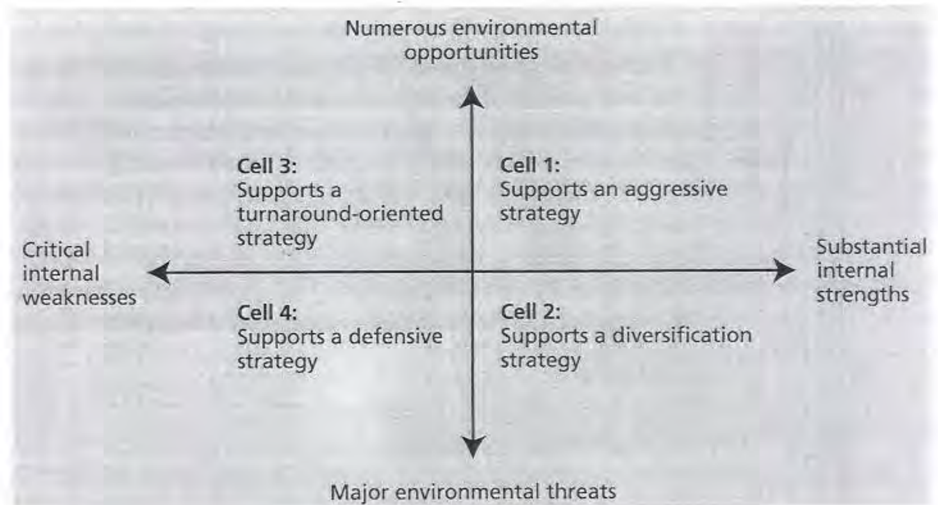
Threats

Growing global computer companies
Major computer competitors

It is logical to envision Apple managers' discussions evolving to a consensus that the combination of Apple's storage and digitalization strengths along with their strong brand franchise with "hip" consumers, when combined with the opportunity potentially arising out of the need for a simple way to legally buy and download music on the Web would be the basis for a compelling strategy for Apple to become a first mover in the emerging downloadable music industry.

Exhibit 6.2 illustrates how SWOT analysis might take managerial planning discussions into a slightly more structured approach to aid strategic analysis. The objective is identification of one of four distinct patterns in the match between a firm's internal resources and

EXHIBIT 6.2
SWOT Analysis Diagram



external situation. Cell 1 is the most favorable situation; the firm faces several environmental opportunities and has numerous strengths that encourage pursuit of those opportunities. This situation suggests growth-oriented strategies to exploit the favorable match. Our example of Apple Computer's intensive market development strategy in the online music services and the iPod is the result of a favorable match of its strong technical expertise, early entry, and reputation resources with an opportunity for impressive market growth as millions of people sought a legally viable, convenient way to obtain, download, store, and use their own customized music choices.

Recent efforts by Kodak to compete in the ink-jet printer market, highlighted later in this chapter in Exhibit 6.12, Strategy in Action (see page 164), offer another example of a firm in cell 1. Kodak views its expertise in ink pigments, and how to display them in an inexpensive yet impressive manner on all types of paper, as a unique strength from its photography roots that give it a basis for a competitive advantage in both costs and quality with traditional printer makers. Furthermore, it sees consumer frustration with the high costs of ink cartridge replacements in all ink-jet printers as a major external opportunity upon which it can capitalize by offering a printer solution that dramatically lowers a user's total printing costs over time.

Cell 4 is the least favorable situation, with the firm facing major environmental threats from a weak resource position. This situation clearly calls for strategies that reduce or redirect involvement in the products or markets examined by means of SWOT analysis. Texas Instruments (TI) offers a good example of a cell 4 firm. It was a sprawling maker of chips, calculators, laptop PCs, military electronics, and engineering software on a sickening slide toward oblivion just 10 years ago. Rich Templeton, current chairman and CEO, rose to this position based on his success in helping to define and execute TI's strategy to focus narrowly on semiconductors for signal processing. Templeton convinced his boss at the time, Tom Engibous, to divest TI of most of the products and businesses in which it had become involved in order to rebuild TI around its core semiconductor technology, even during the worst downturn in semiconductor history. These actions ultimately reinvigorated the ailing electronics giant and turned it into one of the hottest plays in signal semiconductors by betting the company on an emerging class of chips know as digital signal processors—DSPs. The chips crunch vast streams of data for an array of digital gadgets, phones, and other cellular devices. TI has experienced increasing market share every year since then, and now commands more than 60 percent of the global market for advanced DSPs, becoming the No. 1 chip supplier to the digital wireless phone industry.

In cell 2, a firm that has identified several key strengths faces an unfavorable environment. In this situation, strategies would seek to redeploy those strong resources and competencies to build long-term opportunities in more opportunistic product markets. IBM, a dominant manufacturer of mainframes, servers, and PCs worldwide, has nurtured many strengths in computer-related and software-related markets for many years. Increasingly, however, it has had to address major threats that include product commoditization, pricing pressures, accelerated pace of innovation, and the like. IBM's decision to sell its PC business to the Chinese firm Lenovo and focus instead on continued development of ISSC, better known now as IBM Global Services, has allowed IBM to build a long-term opportunity in the (hopefully) more profitable, growing markets of the next decade. In the past 10 years, Global Services has become the fastest-growing division of the company, its largest employer, and the keystone of IBM's strategic future. The group does everything from running a customer's IT (information technology) department to consulting on legacy system upgrades to building custom supply-chain management applications. As IBM's hardware divisions struggle against price wars and commoditization and its

software units fight to gain share beyond mainframes, it is Global Services that drives the company's growth.

A firm in cell 3 faces impressive market opportunity but is constrained by weak internal resources. The focus of strategy for such a firm is eliminating the internal weaknesses so as to more effectively pursue the market opportunity. Microsoft has big problems with computer viruses. Alleviating such problems, or weaknesses, is driving massive changes in how Microsoft writes software—to make it more secure before it reaches the market rather than fix it later with patches. Microsoft is also shaking up the security software industry by acquiring several smaller companies to accelerate its own efforts to create specialized software that detects, finds, and removes malicious code.[2]

Limitations of SWOT Analysis

SWOT analysis has been a framework of choice among many managers for a long time because of its simplicity and its portrayal of the essence of sound strategy formulation—matching a firm's opportunities and threats with its strengths and weaknesses. But SWOT analysis is a broad conceptual approach, making it susceptible to some key limitations.

1. A SWOT analysis can overemphasize internal strengths and downplay external threats. Strategists in every company have to remain vigilant against building strategies around what the firm does well now (its strengths) without due consideration of the external environment's impact on those strengths. Apple's success with the iPod and its iTunes downloadable music Web site provides a good example of strategists who placed a major emphasis on external considerations—the legal requirements for downloading and subsequently using individual songs, what music to make available, and the evolution of the use of the Web to download music—as a guide to shaping Apple's eventual strategy. What would Apple's success have been like if its strategy had been built substantially with a focus on its technology in making the iPod device and offering it in the consumer marketplace—without bothering with the development and creation of iTunes?

2. A SWOT analysis can be static and can risk ignoring changing circumstances. A frequent admonition about the downfall of planning processes says that plans are one-time events to be completed, typed, and relegated to their spot on a manager's shelf while s/he goes about the actual work of the firm. So it is not surprising that critics of SWOT analysis, with good reason, warn that it is a one-time view of a changing, or moving, situation. Major U.S. airlines pursued strategies built around strengths that were suddenly much less important when airline deregulation took place. Likewise, those airlines built huge competitive advantages around "hub and spoke" systems for bringing small-town flyers to key hubs to be redistributed to flights elsewhere and yet allow for centralized maintenance and economies of scale. The change brought about by discount airlines that "cherry-picked" key routes, and eventual outsourcing of routine maintenance to Latin America and the Caribbean, did great harm to those strategies. Bottom line: SWOT analysis, along with most planning techniques, must avoid being static and ignoring change.

3. A SWOT analysis can overemphasize a single strength or element of strategy. Dell Computer's long-dominant strength based on a highly automated, Internet, or phone-based direct sales model gave Dell, according to chairman and founder Michael Dell, "a competitive advantage [strength] as wide as the Grand Canyon." He viewed it as being

[2] "Aiming to Fix Flaws, Microsoft Buys Another Antivirus Firm," *The Wall Street Journal*, February 9, 2005, p. B1.

prohibitively expensive for any rival to copy this source of strength. Unfortunately for Dell shareholders, Dell's reliance on that "key" strength proved to be an oversimplified basis around which to sustain the company's strategy for continued dominance and growth in the global PC industry. HP's size alone, with its reemphasis on printing and technical skills, and Lenovo's home base in the fast-growing Asian market have overcome Dell's dominance in the global PC industry.

4. A strength is not necessarily a source of competitive advantage. Cisco Systems Inc. has been a dominant player in providing switching equipment and other key networking infrastructure items around which the global computer communications system has been able to proliferate. It has substantial financial, technological, and branding expertise. Cisco Systems twice attempted to use its vast strengths in these areas as the basis to enter and remain in the market for home computer networks and wireless home-networking devices. It failed both times and lost hundreds of millions of dollars in the process. It possesses several compelling strengths, but none were sources of sustainable competitive advantage in the home-computer-networking industry. After leaving that industry for several years, it recently chose to reenter it by acquiring Linksys, an early pioneer in that industry. Cisco management acknowledged that it was doing so precisely because it did not possess those sources of competitive advantage and that, furthermore, it would avoid any interference with that business lest it disrupt the advantage around which Linksys success has been built.

In summary, SWOT analysis is a longtime, traditional approach to internal analysis among many strategists. It offers a generalized effort to examine internal capabilities in light of external factors, most notably key opportunities and threats. It has limitations that must be considered if SWOT analysis is to be the basis for any firm's strategic decision-making process. Another approach to internal analysis that emerged, in part, to add more rigor and depth in the identification of competitive advantages around which a firm might build a successful strategy is value chain analysis. We examine it next.

VALUE CHAIN ANALYSIS

value chain
A perspective in which business is seen as a chain of activities that transforms inputs into outputs that customers value.

value chain analysis
An analysis that attempts to understand how a business creates customer value by examining the contributions of different activities within the business to that value.

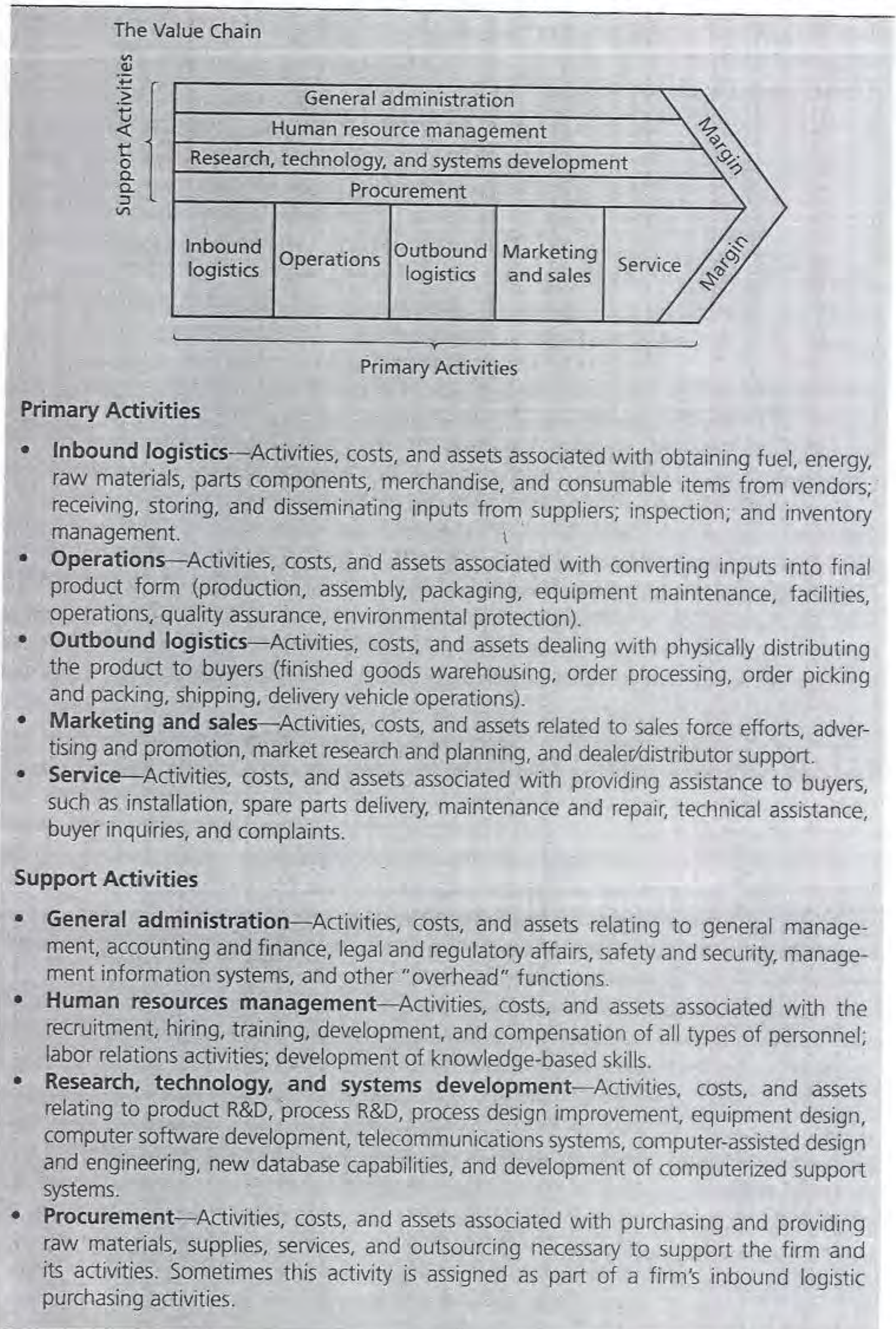
The term **value chain** describes a way of looking at a business as a chain of activities that transform inputs into outputs that customers value. Customer value derives from three basic sources: activities that differentiate the product, activities that lower its cost, and activities that meet the customer's need quickly. **Value chain analysis** (VCA) attempts to understand how a business creates customer value by examining the contributions of different activities within the business to that value.

VCA takes a process point of view: it divides (sometimes called disaggregates) the business into sets of activities that occur *within the business,* starting with the inputs a firm receives and finishing with the firm's products (or services) and after-sales service to customers. VCA attempts to look at its costs across the series of activities the business performs to determine where low-cost advantages or cost disadvantages exist. It looks at the attributes of each of these different activities to determine in what ways each activity that occurs between purchasing inputs and after-sales service helps differentiate the company's products and services. Proponents of VCA believe it allows managers to better identify their firm's competitive advantages by looking at the business as a process—a chain of activities—of what actually happens in the business rather than simply looking at it based on arbitrary organizational dividing lines or historical accounting protocol.

Exhibit 6.3 shows a typical value chain framework. It divides activities within the firm into two broad categories: primary activities and support activities. **Primary activities** (sometimes called *line functions*) are those involved in the physical creation of the product, marketing and transfer to the buyer, and after-sale support. **Support activities** (sometimes

EXHIBIT 6.3
The Value Chain

Source: Based on Michael Porter. *On Competition,* 1998. Harvard Business School Press.



Primary Activities

- **Inbound logistics**—Activities, costs, and assets associated with obtaining fuel, energy, raw materials, parts components, merchandise, and consumable items from vendors; receiving, storing, and disseminating inputs from suppliers; inspection; and inventory management.
- **Operations**—Activities, costs, and assets associated with converting inputs into final product form (production, assembly, packaging, equipment maintenance, facilities, operations, quality assurance, environmental protection).
- **Outbound logistics**—Activities, costs, and assets dealing with physically distributing the product to buyers (finished goods warehousing, order processing, order picking and packing, shipping, delivery vehicle operations).
- **Marketing and sales**—Activities, costs, and assets related to sales force efforts, advertising and promotion, market research and planning, and dealer/distributor support.
- **Service**—Activities, costs, and assets associated with providing assistance to buyers, such as installation, spare parts delivery, maintenance and repair, technical assistance, buyer inquiries, and complaints.

Support Activities

- **General administration**—Activities, costs, and assets relating to general management, accounting and finance, legal and regulatory affairs, safety and security, management information systems, and other "overhead" functions.
- **Human resources management**—Activities, costs, and assets associated with the recruitment, hiring, training, development, and compensation of all types of personnel; labor relations activities; development of knowledge-based skills.
- **Research, technology, and systems development**—Activities, costs, and assets relating to product R&D, process R&D, process design improvement, equipment design, computer software development, telecommunications systems, computer-assisted design and engineering, new database capabilities, and development of computerized support systems.
- **Procurement**—Activities, costs, and assets associated with purchasing and providing raw materials, supplies, services, and outsourcing necessary to support the firm and its activities. Sometimes this activity is assigned as part of a firm's inbound logistic purchasing activities.

primary activities
The activities in a firm of those involved in the physical creation of the product, marketing and transfer to the buyer, and after-sale support.

support activities
The activities in a firm that assist the firm as a whole by providing infrastructure or inputs that allow the primary activities to take place on an ongoing basis.

Strategy in Action

Exhibit 6.4

FedEx Uses Value Chain Analysis to Reinvent Itself

Stories of Fred Smith's early years creating Federal Express, like when he went to Las Vegas to gamble in order to [luckily] win $28,000 to use the next day to make payroll, are the stuff of legend. But the analysis and decision to reinvent FedEx into a logistics information company, rather than an overnight transportation company, has created a revolution in how companies around the world do business, allowing FedEx to maximize the value it adds in the process and the value it receives from doing so. FedEx becomes the logistical infrastructure for any client's business, handling everything from the customer order to the delivery, often including assembly and warehousing in the process.

"Moving an item from point A to point B is no longer a big deal," said James Barksdale, an early architect of the FedEx transformation. "Having the information about the item, where it is, what to connect it up with, and the best way to use that info . . . that is the value. The companies that maximize that step in their value chain will be the big winners." Fred Smith bought into that concept, envisioning a time when FedEx's value—long built on large planes and trucks—would be build on information, computers, coordination, and the FedEx brand.

That day has arrived at FedEx. It is now the linchpin of a just-in-time revolution for companies worldwide. Its planes and trucks are mobile warehouses, sometimes stopping at FedEx-operated assembling centers serving clients, all the while significantly cutting costs and increasing productivity for clients worldwide, large and small.

FedEx's value chain has dramatically shrunk the area involved with planes and trucks, while the overall logistical value added now contributes more than 90 percent of FedEx annual revenues. And, this all started with an objective, careful analysis of the FedEx value chain 10 years ago. That was followed by a visionary commitment to build that chain around activities that contribute the most value to a customer, in the process seeking to make them the core competencies upon which FedEx reinvented itself and built its future success.

Source: Various FedEx Annual Reports and www.fedex.com.

called *staff* or *overhead functions*) assist the firm as a whole by providing infrastructure or inputs that allow the primary activities to take place on an ongoing basis. The value chain includes a profit margin because a markup above the cost of providing a firm's value-adding activities is normally part of the price paid by the buyer—creating value that exceeds cost so as to generate a return for the effort.[3]

Judgment is required across individual firms and different industries because what may be seen as a support activity in one firm or industry may be a primary activity in another. Computer operations might typically be seen as infrastructure support, for example, but may be seen as a primary activity in airlines, newspapers, or banks. Exhibit 6.4, Strategy in Action, describes how Federal Express reconceptualized its company using a value chain analysis that ultimately saw its information support become its primary activity and source of customer value.

Conducting a Value Chain Analysis

Identify Activities

The initial step in value chain analysis is to divide a company's operations into specific activities or business processes, usually grouping them similarly to the primary and support activity categories shown earlier in Exhibit 6.3. Within each category, a firm typically

[3] Different "value chain" or value activities may become the focus of value chain analysis. For example, companies using Hammer's *Reengineering the Corporation* might use (1) order procurement, (2) order fulfillment, (3) customer service, (4) product design, and (5) strategic planning plus support activities.

performs a number of discrete activities that may be key to the firm's success. Service activities, for example, may include such discrete activities as installation, repair, parts distribution, and upgrading—any of which could be a major source of competitive advantage or disadvantage. The manager's challenge at this point is to be very detailed attempting to "disaggregate" what actually goes on into numerous distinct, analyzable activities rather than settling for a broad, general categorization.

Allocate Costs

The next step is to attempt to attach costs to each discrete activity. Each activity in the value chain incurs costs and ties up time and assets. Value chain analysis requires managers to assign costs and assets to each activity, thereby providing a very different way of viewing costs than traditional cost accounting methods would produce. Exhibit 6.5 helps illustrate this distinction. Both approaches in Exhibit 6.5 tell us that the purchasing department (procurement activities) cost $320,075. The traditional method lets us see that payroll expenses are 73 percent [($175 + $57.5)/$320] of our costs with "other fixed charges" the second largest cost, 19 percent [$62/$320] of the total procurement costs. VCA proponents would argue that the benefit of this information is limited. Their argument might be the following:

> With this information we could compare our procurement costs to key competitors, budgets, or industry averages and conclude that we are better, worse, or equal. We could then ascertain that our "people" costs and "other fixed charges" cost are advantages, disadvantages, or "in line" with competitors. Managers could then argue to cut people, add people, or debate fixed overhead charges. However, they would get lost in what is really a budgetary debate without ever examining what it is those people do in accomplishing the procurement function, what value that provides, and how cost effective each activity is.

VCA proponents hold that the activity-based VCA approach would provide a more meaningful analysis of the procurement function's costs and consequent value added. The activity-based side of Exhibit 6.5 shows that approximately 21 percent of the procurement cost or value added involves evaluating supplier capabilities. A rather sizable cost, 20 percent, involves internal administration, with an additional 17 percent spent resolving problems and almost 15 percent spent on quality control efforts. VCA advocates see

EXHIBIT 6.5 **The Difference between Traditional Cost Accounting and Activity-Based Cost Accounting**

Traditional Cost Accounting in a Purchasing Department		Activity-Based Cost Accounting in the Same Purchasing Department for Its "Procurement" Activities	
Wages and salaries	$175,000	Evaluate supplier capabilities	$ 67,875
Employee benefits	57,500	Process purchase orders	41,050
Supplies	3,250	Expedite supplier deliveries	11,750
Travel	1,200	Expedite internal processing	7,920
Depreciation	8,500	Check quality of items purchased	47,150
Other fixed charges	62,000	Check incoming deliveries against purchase orders	24,225
Miscellaneous operating expenses	12,625	Resolve problems	55,000
	$320,075	Internal administration	65,105
			$320,075

this information as being much more useful than traditional cost accounting information, especially when compared with the cost information of key competitors or other "benchmark" companies. VCA supporters assert the following argument that the benefit of this activity-based information is substantial:

> Rather than analyzing just "people" and "other charges," we are now looking at meaningful categorizations of the work that procurement actually does. We see, for example, that a key value-added activity (and cost) involves "evaluating supplier capabilities." The amount spent on "internal administration" and "resolving problems" seems high and may indicate a weakness or area for improvement if the other activities' costs are in line and outcomes favorable. The bottom line is that this approach lets us look at what we actually "do" in the business—the specific activities—to create customer value, and that in turn allows more specific internal analysis than traditional, accounting-based cost categories.

Recognizing the Difficulty in Activity-Based Cost Accounting

It is important to note that existing financial management and accounting systems in many firms are not set up to easily provide activity-based cost breakdowns. Likewise, in virtually all firms, the information requirements to support activity-based cost accounting can create redundant work because of the financial reporting requirements that may force firms to retain the traditional approach for financial statement purposes. The time and energy to change to an activity-based approach can be formidable and still typically involve arbitrary cost allocation decisions—trying to allocate selected asset or people costs across multiple activities in which they are involved. Challenges dealing with a cost-based use of VCA have not deterred use of the framework to identify sources of differentiation. Indeed, conducting a VCA to analyze competitive advantages that differentiate the firm is compatible with the resource-based view's examination of intangible assets and capabilities as sources of distinctive competence.

Identify the Activities That Differentiate the Firm

Scrutinizing a firm's value chain may not only reveal cost advantages or disadvantages, it may also bring attention to several sources of differentiation advantage relative to competitors. Google considers its Internet-based search algorithms (activities) to be far superior to any competitor's. Google knows it has a cost advantage because of the time and expense replicating this activity would take. But Google considers it an even more important source of value to the customer because of the importance customers place on this activity, which differentiates Google from many would-be competitors. Likewise, Federal Express, as we noted in Exhibit 6.4, considers its information management skills to have become the core competence and essence of the company because of the value these skills allow FedEx to provide its customers and the importance they in turn place on such skills. Exhibit 6.6 suggests some factors for assessing primary and support activities' differentiation and contribution.

Examine the Value Chain

Once the value chain has been documented, managers need to identify the activities that are critical to buyer satisfaction and market success. It is those activities that deserve major scrutiny in an internal analysis. Three considerations are essential at this stage in the value chain analysis. First, the company's basic mission needs to influence managers' choice of activities to be examined in detail. If the company is focused on being a low-cost provider, then management attention to lower costs should be very visible, and missions built around commitment to differentiation should find managers spending more on activities that