3

The Internal Organization: Resources, Capabilities, Core Competencies, and Competitive Advantages

Studying this chapter should provide you with the strategic management knowledge needed to:

3-1 Explain why firms need to study and understand their internal organization.

3-2 Define value and discuss its importance.

3-3 Describe the differences between tangible and intangible resources.

3-4 Define capabilities and discuss their development.

3-5 Describe four criteria used to determine if resources and capabilities are core competencies.

3-6 Explain how firms analyze their value chain to determine where they are able to create value when using their resources, capabilities, and core competencies.

3-7 Define outsourcing and discuss reasons for its use.

3-8 Discuss the importance of identifying internal strengths and weaknesses.

3-9 Describe the importance of avoiding core rigidities.

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LARGE PHARMACEUTICAL COMPANIES, BIG DATA ANALYTICS, ARTIFICIAL INTELLIGENCE AND CORE COMPETENCIES: A BRAVE NEW WORLD

To date, and perhaps surprisingly, the idea of using data strategically remains somewhat novel in some organizations. However, the reality of "big data" and "big data analytics" (which is "the process of examining big data to uncover hidden patterns, unknown correlations, and other useful information that can be used to make better decisions") is becoming increasingly popular in business. Indeed, in the current competitive landscape, most businesses must use big data analytics (BDA) across all customer channels (mobile, Web, e-mail, and physical stores) throughout their supply chain to help them become more innovative.

This is the situation for large pharmaceutical companies (the firms often called "big pharma") in that many have been working to develop a core competence in BDA. (We define and discuss core competencies in this chapter.) There are several reasons they are doing this. In addition to the vast increases in the amounts of data that must be studied and interpreted for competitive purposes, "health care reform and the changing landscape of health care delivery" systems throughout the world are influencing these firms to think about developing BDA as a core competence.

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AI can help analyze data on clinical trials, health records, genetic profiles, and preclinical studies. China has a goal to become the world leader in AI.

Many benefits can accrue to big pharma firms that develop BDA as a core competence. For example, having BDA as a core competence can help a firm quickly identify trial candidates and accelerate their recruitment, develop improved inclusion and exclusion criteria to use in clinical trials, and uncover unintended uses and indications for products. In terms of customer functionality, superior products can be provided at a faster pace as a foundation for helping patients live better and healthier lives.

In developing their BDA capabilities, many of the big pharma companies are investing in artificial intelligence (AI). AI provides the capability to analyze many different sets of information. For example, AI can help analyze data on clinical trials, health records, genetic profiles, and preclinical studies. AI can analyze and integrate these data to identify patterns in the data and suggest hypotheses about relationships. A new drug generally requires a decade of research and $2.6 billion of investment. And only about 5 percent of the drugs that enter experimental research make it to the market and are successful. Eventually, it is expected that the use of AI could reduce the early research development time from 4-6 years to 1 year, not only greatly reducing the time of development but also the costs.

As we discuss in this chapter, capabilities are the foundation for developing core competencies. There are several capabilities big pharma companies need for BDA to be a core competence. Supportive architecture, the proper mix of data scientists, and "technology that integrates and manages new types and sources of data flexibility and scalability while maintaining the highest standards of data governance, data quality, and data security" are examples of capabilities that big pharma need if they wish to develop BDA as a core competence. Of course, using artificial intelligence provides strong support for the application of BDA.

Having a strong BDA competence could be critical for pharmaceutical firms in the future. Most Chinese pharmaceutical firms are medium-sized and sell generic drugs and therapeutic medicines, investing in R&D at only about 25% of the amount invested by big pharma in developed countries. However, China has a plan to develop large, competitive pharmaceutical firms by 2025. In 2017, for example, China's second largest class of investments was biopharma. Interestingly, the largest Chinese investment that year was in information systems, including AI. China has a goal to become the world leader in AI.

In recent years, big pharma has been earning mediocre returns of about 3 percent ROI, down from 10 percent a decade earlier. Thus, big pharma executives feel pressure especially with the initial costs of developing BDA and AI. Hopefully, they soon will be able to reduce their costs and experience higher rates of success in the development of new drugs. Until then, however, analysts are predicting record numbers of mergers and acquisitions in the pharmaceutical industry, with big pharma acquiring successful medium-sized pharmaceuticals and biotechnology firms.

Sources: S. Mukherjee, 2018, How big pharma is using AI to make better drugs, *Fortune*, fortune.com, March 19: Z. Torrey, 2018, China prepares for big pharma, thediplomat.com, March 14; E. Corbett, 2018, European mid-sized pharma companies-biotechs and big pharma? *The Pharmaletter*, www.thepharmaletter.com, March 9; M. Jewel, 2018, Signs that 2018 will be a record year for pharma M&A, *The Pharmaletter*, www.thepharmaletter.com, March1; B. Nelson, 2018, Why big pharma and biotech are betting big on AI, *NBC News*, www.nbc.news, March 1; Big data analytics: What it is & why it matters, 2015, *SAS*, www.sas.com, April 2; Big data for the pharmaceutical industry, *Informatica*, www.informatica.com, March 17; B. Atkins, 2015, Big data and the board, *Wall Street Journal Online*, www.wsj.com, April 16; S. F. DeAngelis, 2014, Pharmaceutical big data analytics promises a healthier future, *Enterrasolutions*, www.enterrasolutions.com, June 5; T. Wolfram, 2014, Data analytics has big pharma rethinking its core competencies, *Forbes Online*, www.forbes.com, December 22.

As discussed in the first two chapters, several factors in the global economy, including the rapid development of the Internet's capabilities and globalization in general, are making it difficult for firms to develop competitive advantages.[1] Increasingly, innovation appears to be a vital path to efforts to develop competitive advantages, particularly sustainable ones.[2] Innovative actions are required by big pharma companies, and they need to develop new drugs more quickly and at lower costs while improving the success of the drugs that they develop. As the Opening Case shows, they are trying to use artificial intelligence to help develop capabilities in big data analytics that hopefully can become a core competence.

As is the case for big pharma companies, innovation is critical to most firms' success. This means that many firms seek to develop innovation as a core competence. We define and discuss core competencies in this chapter and explain how firms use their resources and capabilities to form them. As a core competence, innovation has long been critical to Boeing's success, too. Today, however, the firm is focusing on incremental innovations as well as developing new technologies that are linked to major innovations and the projects they spawn, such as the 787 Dreamliner. The first delivery of the 787-10 Dreamliner was made to Singapore Airlines on March 26, 2018. Boeing believes its incremental innovations enable the firm to deliver reliable products to customers more quickly and at a lower cost.[3] As we discuss in this chapter, firms and organizations—such as those we mention here—achieve strategic competitiveness and earn above-average returns by acquiring, bundling, and leveraging their resources for the purpose of taking advantage of opportunities in the external environment in ways that create value for customers.[4]

Even if the firm develops and manages resources in ways that create core competencies and competitive advantages, competitors will eventually learn how to duplicate the benefits of any firm's value-creating strategy; thus, all competitive advantages have a limited life.[5] Because of this, the question of duplication of a competitive advantage is not *if* it will happen, but *when*. In general, a competitive advantage's sustainability is a function of three factors:

1. The rate of core competence obsolescence because of environmental changes
2. The availability of substitutes for the core competence
3. The imitability of the core competence[6]

For all firms, the challenge is to effectively manage current core competencies while simultaneously developing new ones.[7] Only when firms are able to do this can they expect to achieve strategic competitiveness, earn above-average returns, and remain ahead of competitors in both the short and long term.

We studied the general, industry, and competitor environments in Chapter 2. Armed with knowledge about the realities and conditions of their external environment, firms have a better understanding of marketplace opportunities and the characteristics of the competitive environment in which those opportunities exist. In this chapter, we focus on the firm. By analyzing its internal organization, a firm determines what it can do. Matching what a firm *can do* (a function of its resources, capabilities, and core competencies in the internal organization) with what it *might do* (a function of opportunities and threats in the external environment) yields insights for the firm to select strategies from among those we discuss in Chapters 4 through 9.

We begin this chapter by briefly describing conditions associated with analyzing the firm's internal organization. We then discuss the roles of resources and capabilities in developing core competencies, which are the sources of the firm's competitive advantages. Included in this discussion are the techniques firms use to identify and evaluate resources and capabilities and the criteria for identifying core competencies from among them. Resources alone typically do not provide competitive advantages. Instead, resources create value when the firm uses them to form capabilities, some of which become core competencies, and hopefully competitive advantages. Because of the relationship among resources, capabilities, and core competencies, we also discuss the value chain and examine four criteria that firms use to determine if their capabilities are core competencies and, as such, sources of competitive advantage.[8] The chapter closes with comments about outsourcing as well as the need for firms to prevent their core competencies from becoming core rigidities. The existence of core rigidities indicates that the firm is too anchored to its past, a situation that prevents it from continuously developing new capabilities and core competencies.

3-1 Analyzing the Internal Organization

3-1a The Context of Internal Analysis

One of the conditions associated with analyzing a firm's internal organization is the reality that in today's global economy, some of the resources that were traditionally critical to firms' efforts to produce, sell, and distribute their goods or services—such as labor costs, access to financial resources and raw materials, and protected or regulated markets—although still important, are now less likely to be the source of competitive advantages.[9] An important reason for this is that an increasing number of firms are using their resources to form core competencies through which they successfully implement an international strategy (discussed in Chapter 8) as a means of overcoming the advantages created by more traditional resources.

Given the increasing importance of the global economy, those analyzing their firm's internal organization should use a global mind-set to do so. A **global mind-set** is the

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ability to analyze, understand, and manage an internal organization in ways that are not dependent on the assumptions of a single country, culture, or context.[10] Because they are able to span artificial boundaries, those with a global mind-set recognize that their firms must possess resources and capabilities that allow understanding of and appropriate responses to competitive situations that are influenced by country-specific factors and unique cultures. Using a global mind-set to analyze the internal organization has the potential to significantly help the firm in its efforts to outperform rivals.[11]

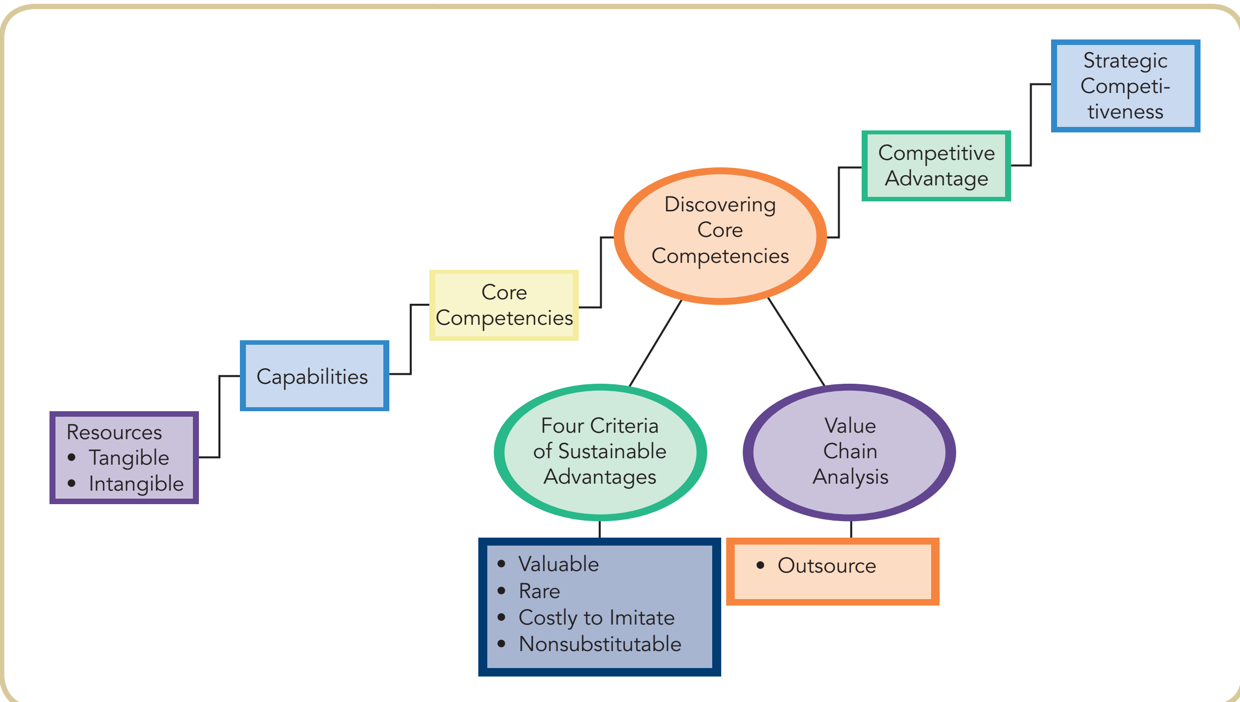
Finally, analyzing the firm's internal organization requires that evaluators examine the firm's entire portfolio of resources and capabilities. This perspective suggests that individual firms possess at least some resources and capabilities that other companies do not—at least not in the same combination. Resources are the source of capabilities, some of which lead to the development of core competencies; in turn, some core competencies may lead to a competitive advantage for the firm.[12] Understanding how to leverage the firm's unique bundle of resources and capabilities is a key outcome decision makers seek when analyzing the internal organization.[13] Figure 3.1 illustrates the relationships among resources, capabilities, core competencies, and competitive advantages and shows how their integrated use can lead to strategic competitiveness. As we discuss next, firms use the resources in their internal organization to create value for customers.

3-1b Creating Value

Firms use their resources as the foundation for producing goods or services that will create value for customers.[14] **Value** is measured by a product's performance characteristics and by its attributes for which customers are willing to pay. Firms create value by innovatively bundling and leveraging their resources to form capabilities and core competencies.[15] Firms with a competitive advantage create more value for customers than do competitors.[16] Walmart uses its "every day low price" approach to doing business (an approach that is grounded in the firm's core competencies, such as information technology and distribution

Value is measured by a product's performance characteristics and by its attributes for which customers are willing to pay.

Figure 3.1 Components of an Internal Analysis



channels) to create value for those seeking to buy products at a low price compared to competitors' prices for those products. The stronger these firms' core competencies, the greater the amount of value they're able to create for their customers.[17]

Ultimately, creating value for customers is the source of above-average returns for a firm. What the firm intends regarding value creation affects its choice of business-level strategy (see Chapter 4) and its organizational structure (see Chapter 11).[18] In Chapter 4's discussion of business-level strategies, we note that value is created by a product's low cost, by its highly differentiated features, or by a combination of low cost and high differentiation compared to competitors' offerings. A business-level strategy is effective only when it is grounded in exploiting the firm's capabilities and core competencies. Thus, the successful firm continuously examines the effectiveness of current capabilities and core competencies while thinking about the capabilities and competencies it will require for future success.[19]

At one time, firms' efforts to create value were largely oriented toward understanding the characteristics of the industry in which they competed and, in light of those characteristics, determining how they should be positioned relative to competitors. This emphasis on industry characteristics and competitive strategy underestimated the role of the firm's resources and capabilities in developing core competencies as the source of competitive advantages. In fact, core competencies, in combination with product-market positions, are the firm's most important sources of competitive advantage.[20] A firm's core competencies, integrated with an understanding of the results of studying the conditions in the external environment, should drive the selection of strategies.[21] As Clayton Christensen noted, "successful strategists need to cultivate a deep understanding of the processes of competition and progress and of the factors that undergird each advantage. Only thus will they be able to see when old advantages are poised to disappear and how new advantages can be built in their stead."[22] By emphasizing core competencies when selecting and implementing strategies, companies learn to compete primarily on the basis of firm-specific differences. However, while doing so they must be simultaneously aware of changes in the firm's external environment.[23]

3-1c The Challenge of Analyzing the Internal Organization

The strategic decisions managers make about the internal organization are nonroutine,[24] have ethical implications,[25] and significantly influence the firm's ability to earn above-average returns.[26] These decisions involve choices about the resources the firm needs to collect and how to best manage and leverage them.

Making decisions involving the firm's assets—identifying, developing, deploying, and protecting resources, capabilities, and core competencies—may appear to be relatively easy. However, this task is as challenging and difficult as any other with which managers are involved; moreover, the task is increasingly internationalized.[27] Some believe that the pressure on managers to pursue only decisions that help the firm meet anticipated quarterly earnings makes it difficult to accurately examine the firm's internal organization.[28]

The challenge and difficulty of making effective decisions are implied by preliminary evidence suggesting that one-half of organizational decisions fail.[29] Sometimes, mistakes are made as the firm analyzes conditions in its internal organization.[30] Managers might, for example, think a capability is a core competence when it is not. This may have been the case at Polaroid Corporation, as decision makers continued to believe that the capabilities it used to build its instant film cameras were highly relevant at the time its competitors were preparing to introduce digital cameras. In this instance, Polaroid's decision makers may have concluded that superior manufacturing was a core competence, as was the firm's ability to innovate in terms of creating value-adding features for its instant

Gene Blevins/Polaris/Newscom

At one time, Polaroid's cameras created a significant amount of value for customers. Poor decisions may have contributed to the firm's subsequent inability to create value and its initial filing for bankruptcy in 2001.

cameras. If a mistake is made when analyzing and managing a firm's resources, decision makers must have the confidence to admit it and take corrective actions.[31]

A firm can improve by studying its mistakes; in fact, the learning generated by making and correcting mistakes can be important in the creation of new capabilities and core competencies.[32] One capability that can be learned from failure is when to quit. Polaroid should have obviously changed its strategy earlier than it did, so it could have been able to avoid demise. Another potential example concerns News Corp.'s Amplify unit (founded 2011), which was created to change the way children are taught. As of mid-2015, the firm had invested over $1 billion in the unit, which makes tablets, sells online curricula, and offers testing services. In 2014, Amplify generated a $193 million loss, facing competition from well-established textbook publishers enhancing their own ability to sell similar digital products. In September 2015, News Corp. decided to sell Amplify to a team of managers and private investors, incurring a significant loss.[33]

As we discuss next, three conditions—uncertainty, complexity, and intraorganizational conflict—affect managers as they analyze the internal organization and make decisions about resources (see Figure 3.2).

When studying the internal organization, managers face uncertainty because of a number of issues, including those of new proprietary technologies, rapidly changing economic and political trends, transformations in societal values, and shifts in customers' demands.[34] Environmental uncertainty increases the complexity and range of issues to examine when studying the internal environment.[35] Consider how uncertainty affects the ways to use resources at coal companies such as Peabody Energy Corp. and Murray Energy Corp. Coal companies have been suffering in the last decade or more with significant regulations and the competition from cleaner forms of energy such as natural gas. They have been aided some by the reduction of regulations by the Trump administration, but the competition from cleaner and cheaper forms of energy remains. Thus, they still have to deal with a complex and uncertain environment.

Figure 3.2 Conditions Affecting Managerial Decisions about Resources, Capabilities, and Core Competencies

Conditions	Uncertainty	Uncertainty exists about the characteristics of the firm's general and industry environments and customers' needs.
	Complexity	Complexity results from the interrelationships among conditions shaping a firm.
	Intraorganizational Conflicts	Intraorganizational conflicts may exist among managers making decisions as well as among those affected by the decisions.

Biases regarding how to cope with uncertainty affect decisions made about how to manage the firm's resources and capabilities to form core competencies.[36] Additionally, intraorganizational conflict may surface when decisions are made about the core competencies a firm should develop and nurture. Conflict might surface in the energy companies mentioned above about the degree to which resources and capabilities should be used to form new core competencies to support newer "clean technologies."

In making decisions affected by these three conditions, judgment is required. *Judgment* is the capability of making successful decisions when no obviously correct model or rule is available or when relevant data are unreliable or incomplete. In such situations, decision makers must be aware of possible cognitive biases, such as overconfidence. Individuals who are too confident in the decisions they make about how to use the firm's resources may fail to fully evaluate contingencies that could affect those decisions.[37]

When exercising judgment, decision makers often take intelligent risks. In the current competitive landscape, executive judgment can become a valuable capability. One reason is that, over time, effective judgment that decision makers demonstrate allows a firm to build a strong reputation and retain the loyalty of stakeholders whose support is linked to above-average returns.[38]

Finding individuals who can make the most successful decisions about using the organization's resources is challenging, and important. The quality of decisions regarding resources and their management affect a firm's ability to achieve strategic competitiveness. Individuals holding such key decision-making positions are called *strategic leaders*. Discussed fully in Chapter 12 and for our purposes in this chapter, we can think of strategic leaders as individuals with an ability to examine the firm's resources, capabilities, and core competencies and make effective choices about their use.

Next, we consider the relationships among a firm's resources, capabilities, and core competencies. While reading these sections, keep in mind that organizations have more resources than capabilities and more capabilities than core competencies.

3-2 Resources, Capabilities, and Core Competencies

Resources, capabilities, and core competencies are the foundation of competitive advantage. Resources are bundled to create organizational capabilities. In turn, capabilities are the source of a firm's core competencies, which are the basis of establishing competitive advantages.[39] We show these relationships in Figure 3.1 and discuss them next.

3-2a Resources

Broad in scope, resources cover a spectrum of individual, social, and organizational phenomena. By themselves, resources do not allow firms to create value for customers as the foundation for earning above-average returns. Indeed, resources are combined to form capabilities.[40] For example, Subway links its fresh ingredients with several other resources, including the continuous training it provides to those running the firm's fast food restaurants, as the foundation for customer service as a capability; customer service is also a core competence for Subway.

As its sole distribution channel, the Internet is a resource for Amazon.com. The firm uses the Internet to sell goods at prices that typically are lower than those offered by competitors selling the same goods through more costly brick-and-mortar storefronts. By combining other resources (such as access to a wide product inventory), Amazon has developed a reputation for excellent customer service. Amazon's capability in terms of customer service is a core competence as well in that the firm creates unique value for customers through the services it provides to them.

Some of a firm's resources (defined in Chapter 1 as inputs to the firm's production process) are tangible while others are intangible. **Tangible resources** are assets that can be observed and quantified. Production equipment, manufacturing facilities, distribution centers, and formal reporting structures are examples of tangible resources. For energy giant Kinder Morgan, its stock of oil and gas pipelines are a key tangible resource. **Intangible resources** are assets that are rooted deeply in the firm's history, accumulate over time, and are relatively difficult for competitors to analyze and imitate. Because they are embedded in unique patterns of routines, intangible resources are difficult for competitors to analyze and imitate. Knowledge, trust between managers and employees, managerial capabilities, organizational routines (the unique ways people work together), scientific capabilities, the capacity for innovation, brand name, the firm's reputation for its goods or services and how it interacts with people (such as employees, customers, and suppliers), and organizational culture are intangible resources.[41]

Intangible resources require nurturing to maintain their ability to help firms engage in competitive battles. For example, brand has long been a valuable intangible resource for Coca-Cola Company. The same is true for "logo-laden British brand Superdry," a case highlighted at the end of the chapter. As you will read, SuperGroup PLC, the owner of Superdry, encountered problems a few years ago in its efforts to maintain and enhance the value of the Superdry brand. New management and a new approach are attempting to renew the Superdry brand.[42]

As noted in the Strategic Focus, intangible resources may be even more important in the development of core competencies. Of course, three of the firms described in the Strategic Focus—Fainsbert Mase Brown & Susmann, Genpact, and Document Security Systems—were service firms, which commonly base their core competencies on their human capital. However, even Hecla Mining Company, which has significant investments in specialized mining equipment, must also have valuable human capital for its core competence in "high grade, narrow-vein underground mining."

For each analysis, tangible and intangible resources are grouped into categories. The four primary categories of tangible resources are financial, organizational, physical, and technological (see Table 3.1). The three primary categories of intangible resources are human, innovation, and reputational (see Table 3.2).

Tangible resources are assets that can be observed and quantified.

Intangible resources are assets that are rooted deeply in the firm's history, accumulate over time, and are relatively difficult for competitors to analyze and imitate.

Table 3.1 Tangible Resources

Financial Resources	• **The firm's capacity to borrow** • **The firm's ability to generate funds through internal operations**
Organizational Resources	• **Formal reporting structures**
Physical Resources	• **The sophistication of a firm's plant and equipment and the attractiveness of its location** • **Distribution facilities** • **Product inventory**
Technological Resources	• **Availability of technology-related resources such as copyrights, patents, trademarks, and trade secrets**

Sources: Adapted from J. B. Barney, 1991, Firm resources and sustained competitive advantage, *Journal of Management*, 17: 101; R. M. Grant, 1991, *Contemporary Strategy Analysis*, Cambridge: U.K.: Blackwell Business, 100–102.

Strategic Focus

Tangible and Intangible Resources as the Base for Core Competencies

While tangible resources are important, intangible resources are perhaps even more important in the development of firms' core competencies. Understandably, most professional service firms have few tangible resources but can have high market value primarily because of their intangible resources. For example, Fainsbert Mase Brown & Susmann, LLP is a premier law firm located in Los Angeles, California. Obviously, its goal is to provide superior legal services to its clients. Within this broad frame, however, there is a core competence. The firm provides legal advice and support on significant real estate, business, and corporate transactions for large institutions, high net-worth individuals, and privately owned businesses. For example, in 2018 the firm provided the legal services to conclude the negotiations for the Industrial Realty Group's purchase of the 3.1 million square foot IBM technology campus in Rochester, Minnesota. This complex transaction required more than one year to negotiate with a multi-level corporate legal team.

Likewise, other major service firms are heavily dependent on their intangible assets. For example, Genpact requires highly knowledgeable human capital for its core competence. Genpact provides solutions to major process problems for its clients. Genpact describes its competence as providing "digital-led innovation and digitally enabled intelligent operations" for clients. The firm solves clients' problems using data analytics, helping its clients transform their operations. Another technology-based service firm is Document Security Systems, Inc. (DSS). DSS has a core competence in the development of anti-counterfeit, authentication, and diversion software that protects organizations against Internet fraud and theft. And it tries to remain a leader in this field through continued investment in research and new technology. In 2018, it announced an agreement to partner with the Hong Kong R&D Center for Logistics and Supply Chain to develop the next generation of protection products using blockchain technology.

Firms with larger amounts of tangible resources also need valuable intangible resources. For example, Hecla Mining Company has a core competence in "high grade, narrow-vein underground mining." Obviously, the company has significant investments in specialized mining equipment in order to employ this core competence. But significant engineering and mining knowledge and expertise is required to successfully engage in this type of mining. This knowledge and expertise resides in the human capital (intangible assets) within the firm.

It is important to note that firms' reputations are often significant intangible assets. For example, professional service firms must be considered not only highly knowledgeable in the areas in which they compete, but also must be considered honest and highly trustworthy. In meeting this challenge, Genpact was selected as one of the "World's Most Ethical Companies" in 2018. Companies can also enhance intangible assets, such as their reputation, through use of their core competencies. For example, in the aftermath of Hurricane Harvey in 2017, Johnson & Johnson provided medical supplies, FedEx provided logistical support to provide bottled water, and Butterball provided 40,000 pounds of canned turkey to help citizens in the recovery. Companies that are ethical and good corporate citizens often are highly respected and are called on to use their core competencies to serve an increasing number of customers.

360b/Alamy Stock Photo

In 2018, Genpact announced an agreement to partner with the Hong Kong R&D Center for Logistics and Supply Chain to develop the next generation of protection products using blockchain technology.

Sources: Document Security Systems, Inc., 2018, DSS Partners with Hong Kong R&D Centre for logistics and supply chain management enabling technologies for blockchain research, globenewswire.com, March 19; *StreetInsider*, 2018, Hecla Mining (HL) Announces $462 million Acquisition of Klondes Mines, Ltd. (K), www.streetinsider.com, March 19; *BusinessInsider*, 2018, Genpact named one of the 2018 world's most ethical companies by the Ethisphere Institute, markets.businessinsider.com, March14; *Cision PR Newswire,* 2018, Fainsbert Mase Brown & Sussmann, LLP completes acquisition closing on 3.1 million sq. ft. IBM campus in Minnesota, www.prnewswire, February 23; P. N. Danziger, 2018, Fire, floods, hurricanes: How and why corporations must help, *Forbes,* www.forbes.com, October 20.

Table 3.2 Intangible Resources

Human Resources	• **Knowledge** • **Trust** • **Skills** • **Abilities to collaborate with others**
Innovation Resources	• **Ideas** • **Scientific capabilities** • **Capacity to innovate**
Reputational Resources	• **Brand name** • **Perceptions of product quality, durability, and reliability** • **Positive reputation with stakeholders such as suppliers and customers**

Sources: Adapted from R. Hall, 1992, The strategic analysis of intangible resources, *Strategic Management Journal*, 13: 136–139: R. M. Grant, 1991, *Contemporary Strategy Analysis*, Cambridge: U.K.: Blackwell Business, 101–104.

Tangible Resources

As tangible resources, a firm's borrowing capacity and the status of its physical facilities are visible. The value of many tangible resources can be established through financial statements, but these statements do not account for the value of all of the firm's assets because they disregard some intangible resources.[43] The value of tangible resources is also constrained because they are hard to leverage—it is difficult to derive additional business or value from a tangible resource. For example, an airplane is a tangible resource, but "you can't use the same airplane on five different routes at the same time. You can't put the same crew on five different routes at the same time. And the same goes for the financial investment you've made in the airplane."[44]

Although production assets are tangible, many of the processes necessary to use them are intangible as in the case of Hecla Mining Company described in the Strategic Focus. Thus, the learning and potential proprietary processes associated with a tangible resource, such as manufacturing facilities, can have unique intangible attributes, such as quality control processes, unique manufacturing processes, and technologies that develop over time.[45]

Intangible Resources

Compared to tangible resources, intangible resources are a superior source of capabilities and subsequently, core competencies.[46] In fact, in the global economy, a firm's intellectual capital often plays a more critical role in corporate success than do physical assets.[47] Because of this, being able to effectively manage intellectual capital is an increasingly important skill for today's leaders to develop.[48]

Because intangible resources are less visible and more difficult for competitors to understand, purchase, imitate, or substitute for, firms prefer to rely on them rather than on tangible resources as the foundation for their capabilities. In fact, the more unobservable (i.e., intangible) a resource is, the more valuable that resource is to create capabilities.[49] Another benefit of intangible resources is that, unlike most tangible resources, their use can be leveraged. For instance, sharing knowledge among employees does not diminish its value for any one person. To the contrary, two people sharing their individualized knowledge sets often can be leveraged to create additional knowledge that, although new to each individual, contributes potentially to performance improvements for the firm.

Reputational resources (see Table 3.2) are important sources of a firm's capabilities and core competencies. Indeed, some argue that a positive reputation can even be a source of competitive advantage.[50] Earned through the firm's actions as well as its words, a value-creating reputation is a product of years of superior marketplace competence as perceived by stakeholders.[51] A reputation indicates the level of awareness a firm has been able to develop among stakeholders and the degree to which they hold the firm in high esteem.[52]

A well-known and highly valued brand name is a specific reputational resource.[53] A continuing commitment to innovation and aggressive advertising facilitates firms' efforts to take advantage of the reputation associated with their brands.[54] Harley-Davidson has a reputation for producing and servicing high-quality motorcycles with unique designs. Because of the desirability of its reputation, the company also produces a wide range of accessory items that it sells based on its reputation for offering unique products with high quality. Sunglasses, jewelry, belts, wallets, shirts, slacks, and hats are just a few of the large variety of accessories customers can purchase from a Harley-Davidson dealer or from its online store.[55]

iStock.com/Courtney Keating

Developing capabilities in specific functional areas can give companies a competitive edge. The effective use of social media to direct advertising to specific market segments has given some firms an advantage over their rivals.

Taking advantage of today's technologies, some firms are using social media as a means of influencing their reputation. Recognizing that thousands of conversations occur daily throughout the world and that what is being said can affect its reputation, Coca-Cola company encourages its employees to be a part of these social media-based discussions as a means of positively influencing the company's reputation. Driving the nature of these conversations is a set of social media principles that Coca-Cola employees use as a foundation for how they will engage with various social media. Being transparent and protecting consumers' privacy are examples of the commitments the firm established.[56]

3-2b Capabilities

The firm combines individual tangible and intangible resources to create capabilities. In turn, capabilities are used to complete the organizational tasks required to produce, distribute, and service the goods or services the firm provides to customers for the purpose of creating value for them. As a foundation for building core competencies and hopefully competitive advantages, capabilities are often based on developing, carrying, and exchanging information and knowledge through the firm's human capital.[57] Hence, the value of human capital in developing and using capabilities and, ultimately, core competencies cannot be overstated.[58] In fact, it seems to be "well known that human capital makes or breaks companies."[59] At pizza-maker Domino's, human capital is critical to the firm's efforts to change how it competes. Describing this, CEO Patrick Doyle says that, in many ways, Domino's is becoming "a technology company … that has adapted the art of pizza-making to the digital age."[60]

As illustrated in Table 3.3, capabilities are often developed in specific functional areas (such as manufacturing, R&D, and marketing) or in a part of a functional area (e.g., advertising). Table 3.3 shows a grouping of organizational functions and the capabilities that some companies are thought to possess in terms of all or parts of those functions.

Table 3.3 Example of Firms' Capabilities

Functional Areas	Capabilities	Examples of Firms
Distribution	• Effective use of logistics management techniques	• Walmart
Human Resources	• Motivating, empowering, and retaining employees	• Microsoft
Management Information Systems	• Effective and efficient control of inventories through point-of-purchase data collection methods	• Walmart
Marketing	• Effective promotion of brand-name products • Effective customer service • Innovative merchandising	• Procter & Gamble • Ralph Lauren Corp. • McKinsey & Co. • Nordstrom Inc. • Crate & Barrel
Management	• Ability to envision the future of clothing	• Hugo Boss • Zara
Manufacturing	• Design and production skills yielding reliable products • Product and design quality • Miniaturization of components and products	• Komatsu • Witt Gas Technology • Sony
Research & Development	• Innovative technology • Development of sophisticated elevator control solutions • Rapid transformation of technology into new products and processes • Digital technology	• Caterpillar • Otis Elevator Co. • Chaparral Steel • Thomson Consumer Electronics

3-2c Core Competencies

Defined in Chapter 1, core competencies are capabilities that serve as a source of competitive advantage for a firm over its rivals. Core competencies distinguish a company competitively and reflect its personality. Core competencies emerge over time through an organizational process of accumulating and learning how to deploy different resources and capabilities.[61] As the capacity to take action, core competencies are the "crown jewels of a company," the activities the company performs especially well compared to competitors and through which the firm adds unique value to the goods or services it sells to customers.[62] Thus, if a big pharma company (such as Pfizer) developed big data analytics as a core competence, one could conclude that the firm had formed capabilities through which it was able to analyze and effectively use huge amounts of data in a competitively superior manner.

Innovation is thought to be a core competence at Apple. As a capability, R&D activities are the source of this core competence. More specifically, the way Apple has combined some of its tangible (e.g., financial resources and research laboratories) and intangible (e.g., scientists and engineers and organizational routines) resources to complete research and development tasks creates a capability in R&D. By emphasizing its R&D capability, Apple can innovate in ways that create unique value for customers in the form of the products it sells, suggesting that innovation is a core competence for Apple.

Excellent customer service in its retail stores is another of Apple's core competencies. In this instance, unique and contemporary store designs (a tangible resource) are combined with knowledgeable and skilled employees (an intangible resource) to provide superior service to customers. A number of carefully developed training and development procedures are capabilities on which Apple's core competence of excellent customer service is based. The procedures that are capabilities include specification of how employees are to interact with customers, carefully written training manuals to describe on-site tech support that is to be provided to customers, and deep thinking about every aspect of the store's design including music that is played. Apple has a special training program designed to build associates' knowledge of Apple products and how to sell them.[63]

3-3 Building Core Competencies

Two tools help firms identify their core competencies. The first consists of four specific criteria of sustainable competitive advantage that can be used to determine which capabilities are core competencies. Because the capabilities shown in Table 3.3 have satisfied these four criteria, they are core competencies. The second tool is the value chain analysis. Firms use this tool to select the value-creating competencies that should be maintained, upgraded, or developed and those that should be outsourced.

3-3a The Four Criteria of Sustainable Competitive Advantage

Capabilities that are valuable, rare, costly to imitate, and nonsubstitutable are core competencies (see Table 3.4). In turn, core competencies help firms to gain competitive advantages over their rivals. Capabilities failing to satisfy the four criteria are not core competencies, meaning that although every core competence is a capability, not every capability is a core competence. In slightly different words, for a capability to be a core competence, it must be valuable and unique from a customer's point of view. For a core competence to be a potential source of competitive advantage, it must be inimitable and nonsubstitutable by competitors.[64]

A sustainable competitive advantage exists only when competitors are unable to duplicate the benefits of a firm's strategy or when they lack the resources to attempt imitation. For some period of time, the firm may have a core competence by using capabilities that are valuable and rare, but imitable. For example, some firms are trying to develop a core competence and potentially, a competitive advantage by out-greening their competitors. (Interestingly, developing a "green" core competence can contribute to the firm's efforts to earn above-average returns while benefitting the broader society.) For many years, Walmart has been committed to using its resources in ways that support environmental sustainability while pursuing a competitive advantage in the process. In this regard, Walmart has three major end goals: to create zero waste, operate with 100 percent renewable energy, and sell products that sustain our resources and the environment. To facilitate these efforts, Walmart recently labeled over 10,000 products on its e-commerce site as products that are "Made by a Sustainability Leader." Initially, these items were batched into roughly 80 product categories. In addition to seeking

Table 3.4 The Four Criteria of Sustainable Competitive Advantage

Valuable Capabilities	• **Help a firm neutralize threats or exploit opportunities**
Rare Capabilities	• **Are not possessed by many others**
Costly-to-Imitate Capabilities	• **Historical: A unique and a valuable organizational culture or brand name** • **Ambiguous cause: The causes and uses of a competence are unclear** • **Social complexity: Interpersonal relationships, trust, and friendship among managers, suppliers, and customers**
Nonsubstitutable Capabilities	• **No strategic equivalent**

a competitive advantage through these actions, Walmart hoped to make it easier for customers to make "sustainable choices" when purchasing products. Walmart is also working to lead the industry in deploying clean technologies as a means of reducing fuel consumption and air pollution.[65] Of course, Walmart competitors such as Target are engaging in similar actions. Time will reveal the degree to which Walmart's green practices can be imitated.

The length of time a firm can expect to create value by using its core competencies is a function of how quickly competitors can successfully imitate a good, service, or process. Value-creating core competencies may last for a relatively long period of time only when all four of the criteria we discuss next are satisfied. Thus, Walmart would know that it has a core competence and possibly, a competitive advantage in terms of green practices if the ways the firm uses its resources to complete these practices satisfy the four criteria.

Valuable

Valuable capabilities allow the firm to exploit opportunities or neutralize threats in its external environment. By effectively using capabilities to exploit opportunities or neutralize threats, a firm creates value for customers.[66] For example, Groupon created the "daily deal" marketing space; the firm reached $1 billion in revenue faster than any other company in history. In essence, the opportunity Groupon's founders pursued was to create a marketplace through which businesses could introduce their goods or services to customers who would be able to experience them at a discounted price. Restaurants, hair and nail salons, and hotels are examples of the types of companies making frequent use of Groupon's services. Young, urban professionals desiring to affordably experience the cities in which they live are the firm's target customers. But, Groupon's financial performance has been lower than desired by investors primarily because of competition.[67] While offering value to customers, the capabilities to offer its services can be imitated and its initial success invited rivals to enter the market. Competing daily-deal websites such as LivingSocial quickly surfaced and offered similar and often less expensive deals. In fact, many competitors have entered the market, to include Yipit, Woot, RetailMeNot, Tanga, and Ebate in addition to LivingSocial.[68]

Rare

Rare capabilities are capabilities that few, if any, competitors possess. A key question to be answered when evaluating this criterion is "how many rival firms possess these valuable capabilities?" Capabilities possessed by many rivals are unlikely to become core competencies for any of the involved firms. Instead, valuable but common (i.e., not rare) capabilities are sources of competitive parity.[69] Competitive advantage results only when firms develop and exploit valuable capabilities that become core competencies and that differ from those shared with competitors. The central problem for Groupon is that its capabilities to produce the "daily deal" reached competitive parity quickly. Similarly, Walmart has developed valuable capabilities that it uses to engage in green practices; but, as mentioned previously, Target seeks to develop sustainability capabilities through which it can duplicate Walmart's green practices. Target's success in doing so, if this happens, suggests that Walmart's green practices are valuable but not rare.

Valuable capabilities allow the firm to exploit opportunities or neutralize threats in its external environment.

Rare capabilities are capabilities that few, if any, competitors possess.

Costly-to-imitate capabilities are capabilities that other firms cannot easily develop.

Costly to Imitate

Costly-to-imitate capabilities are capabilities that other firms cannot easily develop. Capabilities that are costly to imitate are created because of one reason or a combination of three reasons (see Table 3.4). First, a firm sometimes is able to develop capabilities because of *unique historical conditions*. As firms evolve, they often acquire or develop capabilities that are unique to them.[70] A firm with a unique and valuable *organizational culture* that emerged in the early stages of the company's history "may have an imperfectly imitable advantage over firms founded in another historical period,"[71] one in which less valuable or less competitively useful values and beliefs strongly influenced the development of the firm's culture. Briefly discussed in Chapter 1, organizational culture is a set of values that are shared by members in the organization. An organizational culture is a source of advantage when employees are held together tightly by their belief in it and the leaders who helped to create it.[72] Historically, emphasizing cleanliness, consistency, and service and the training that reinforces the value of these characteristics created a culture at McDonald's that some thought was a core competence and a competitive advantage for the firm. However, as explained in Chapter 2's Opening Case, McDonald's has experienced problems with a number of strategic actions taken by competitors. McDonald's hired a new CEO in 2015 and is now making a number of menu changes to make its food offerings healthier and more attractive overall to customers.[73] McDonald's hopes these changes along with others will help it to reinvigorate its historically unique culture as a core competence.

The Washington Post/Getty Images

Southwest Airlines crew hold puppies who became homeless after Hurricane Maria damaged the island of Puerto Rico. The flight, which was donated by Southwest Airlines, carried 14,000 pounds of supplies.

A second condition of being costly to imitate occurs when the link between the firm's core competencies and its competitive advantage is *causally ambiguous*.[74] In these instances, competitors can't clearly understand how a firm uses its capabilities that are core competencies as the foundation for competitive advantage. As a result, firms are uncertain about the capabilities they should develop to duplicate the benefits of a competitor's value-creating strategy. For years, firms tried to imitate Southwest Airlines' low-cost strategy, but most have been unable to do so, primarily because they can't duplicate this firm's unique culture.

Social complexity is the third reason that capabilities can be costly to imitate. Social complexity means that at least some, and frequently many, of the firm's capabilities are the product of complex social phenomena. Interpersonal relationships, trust, friendships among managers and between managers and employees, and a firm's reputation with suppliers and customers are examples of socially complex capabilities.[75] Southwest Airlines is careful to hire people who fit with its culture. This complex interrelationship between the culture and human capital adds value in ways that other airlines cannot, such as jokes on flights by the flight attendants or the cooperation between gate personnel and pilots.

Nonsubstitutable

Nonsubstitutable capabilities are capabilities that do not have strategic equivalents. This final criterion "is that there must be no strategically equivalent valuable resources that are themselves either not rare or imitable. Two valuable firm resources (or two bundles

Nonsubstitutable capabilities are capabilities that do not have strategic equivalents.

Table 3.5 Outcomes from Combinations of the Criteria for Sustainable Competitive Advantage

Is the Capability Valuable?	Is the Capability Rare?	Is the Capability Costly to Imitate?	Is the Capability Nonsubstitutable?	Competitive Consequences	Performance Implications
No	No	No	No	• Competitive disadvantage	• Below-average returns
Yes	No	No	Yes/no	• Competitive parity	• Average returns
Yes	Yes	No	Yes/no	• Temporary competitive advantage	• Average returns to above-average returns
Yes	Yes	Yes	Yes/no	• Sustainable competitive advantage	• Above-average returns

of firm resources) are strategically equivalent when they each can be separately exploited to implement the same strategies."[76] In general, the strategic value of capabilities increases as they become more difficult to substitute. The more intangible, and hence invisible, capabilities are, the more difficult it is for firms to find substitutes and the greater the challenge is to competitors trying to imitate a firm's value-creating strategy. Firm-specific knowledge and trust-based working relationships between managers and nonmanagerial personnel, such as has existed for years at Southwest Airlines, are examples of capabilities that are difficult to identify and for which finding a substitute is challenging. However, causal ambiguity may make it difficult for the firm to learn and may stifle progress because the firm may not know how to improve processes that are not easily codified and thus are ambiguous.[77]

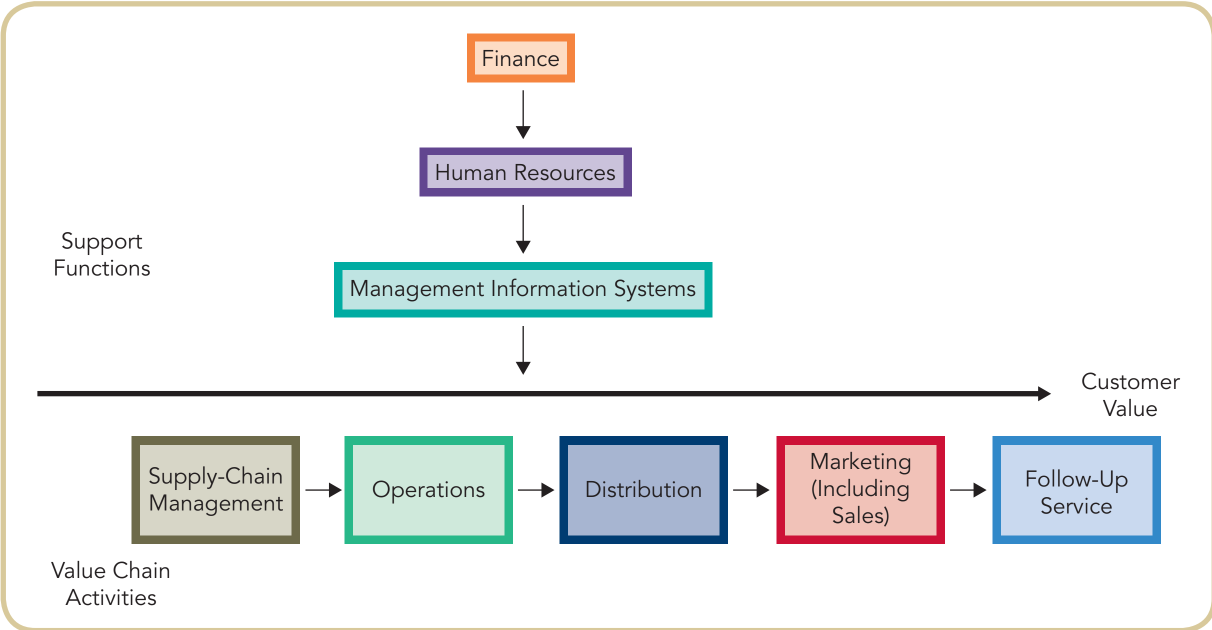
In summary, only using valuable, rare, costly-to-imitate, and nonsubstitutable capabilities has the potential for the firm to create sustainable competitive advantages. Table 3.5 shows the competitive consequences and performance implications resulting from combinations of the four criteria of sustainability. The analysis suggested by the table helps managers determine the strategic value of a firm's capabilities. The firm should not emphasize capabilities that fit the criteria described in the first row in the table (i.e., resources and capabilities that are neither valuable nor rare and that are imitable and for which strategic substitutes exist). Capabilities yielding competitive parity and either temporary or sustainable competitive advantage, however, should be supported. Some competitors such as Coca-Cola and PepsiCo and Boeing and Airbus may have capabilities that result in competitive parity. In such cases, the firms will nurture these capabilities while simultaneously trying to develop capabilities that can yield either a temporary or sustainable competitive advantage.[78]

3-3b Value Chain Analysis

Value chain analysis allows the firm to understand the parts of its operations that create value and those that do not.[79] Understanding these issues is important because the firm earns above-average returns only when the value it creates is greater than the costs incurred to create that value.[80]

The value chain is a template that firms use to analyze their cost position and to identify the multiple means that can be used to facilitate implementation of a chosen strategy.[81] Today's competitive landscape demands that firms examine their value chains in a global rather than a domestic-only context.[82] In particular, activities associated with supply chains should be studied within a global context.[83]

Figure 3.3 A Model of the Value Chain



We show a model of the value chain in Figure 3.3. As depicted in the model, a firm's value chain is segmented into value chain activities and support functions. **Value chain activities** are activities or tasks the firm completes in order to produce products and then sell, distribute, and service those products in ways that create value for customers. **Support functions** include the activities or tasks the firm completes in order to support the work being done to produce, sell, distribute, and service the products the firm is producing. A firm can develop a capability and/or a core competence in any of the value chain activities and in any of the support functions. When it does so, it has established an ability to create value for customers. In fact, as shown in Figure 3.3, customers are the ones firms seek to serve when using value chain analysis to identify their capabilities and core competencies. When using their unique core competencies to create unique value for customers that competitors cannot duplicate, firms have established one or more competitive advantages.[84] Deutsche Bank believes that its application development and information security technologies are proprietary core competencies that are a source of competitive differentiation for the firm.[85] As explained in a Strategic Focus about outsourcing later in the chapter, Deutsche Bank will not outsource these two technologies given that the firm concentrates on them as a means of creating value for customers.

The activities associated with each part of the value chain are shown in Figure 3.4, while the activities that are part of the tasks firms complete when dealing with support functions appear in Figure 3.5. All items in both figures should be evaluated relative to competitors' capabilities and core competencies. To become a core competence and a source of competitive advantage, a capability must allow the firm to either:

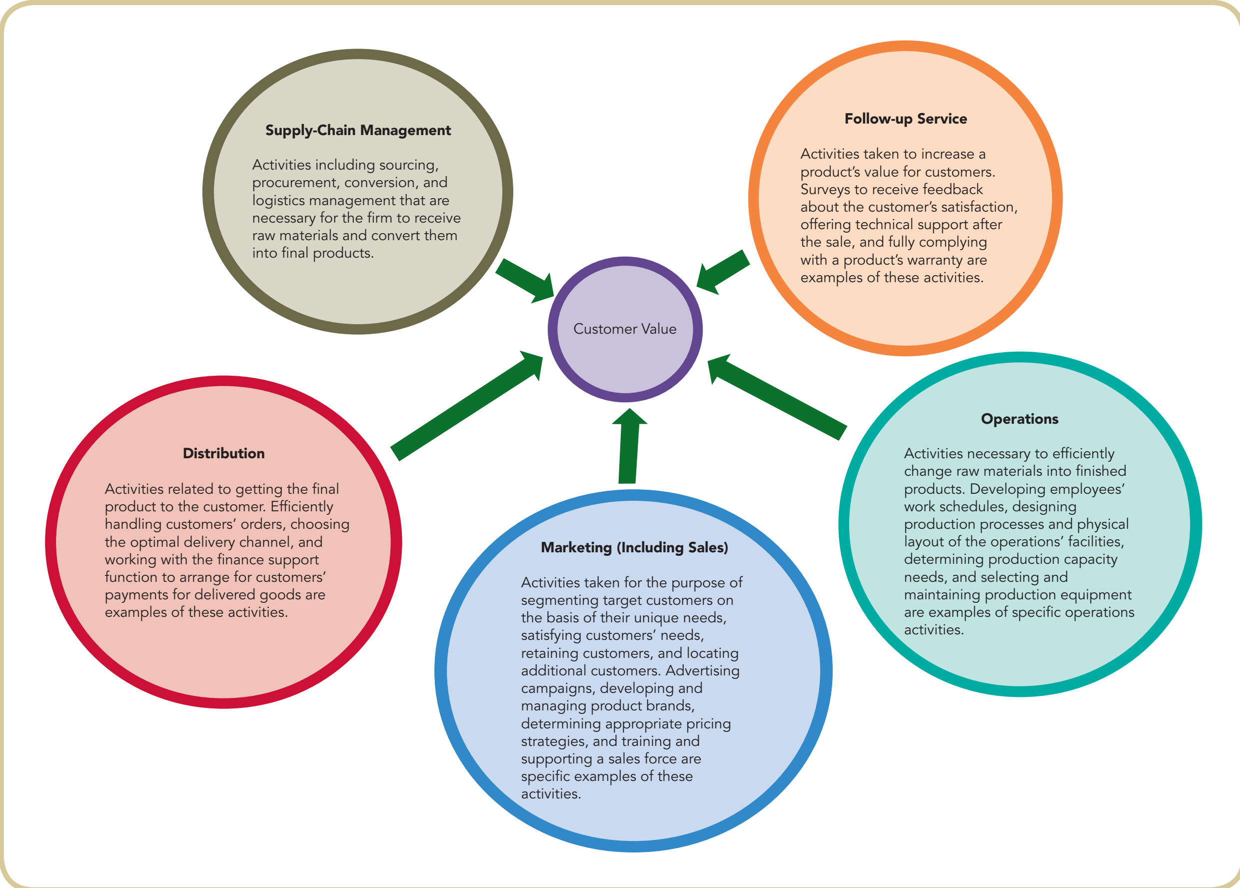
1. Perform an activity in a manner that provides value superior to that provided by competitors, or
2. Perform a value-creating activity that competitors cannot perform.

Only under these conditions does a firm create value for customers and have opportunities to capture that value.

Value chain activities are activities or tasks the firm completes in order to produce products and then sell, distribute, and service those products in ways that create value for customers.

Support functions include the activities or tasks the firm completes in order to support the work being done to produce, sell, distribute, and service the products the firm is producing.

Figure 3.4 Creating Value through Value Chain Activities

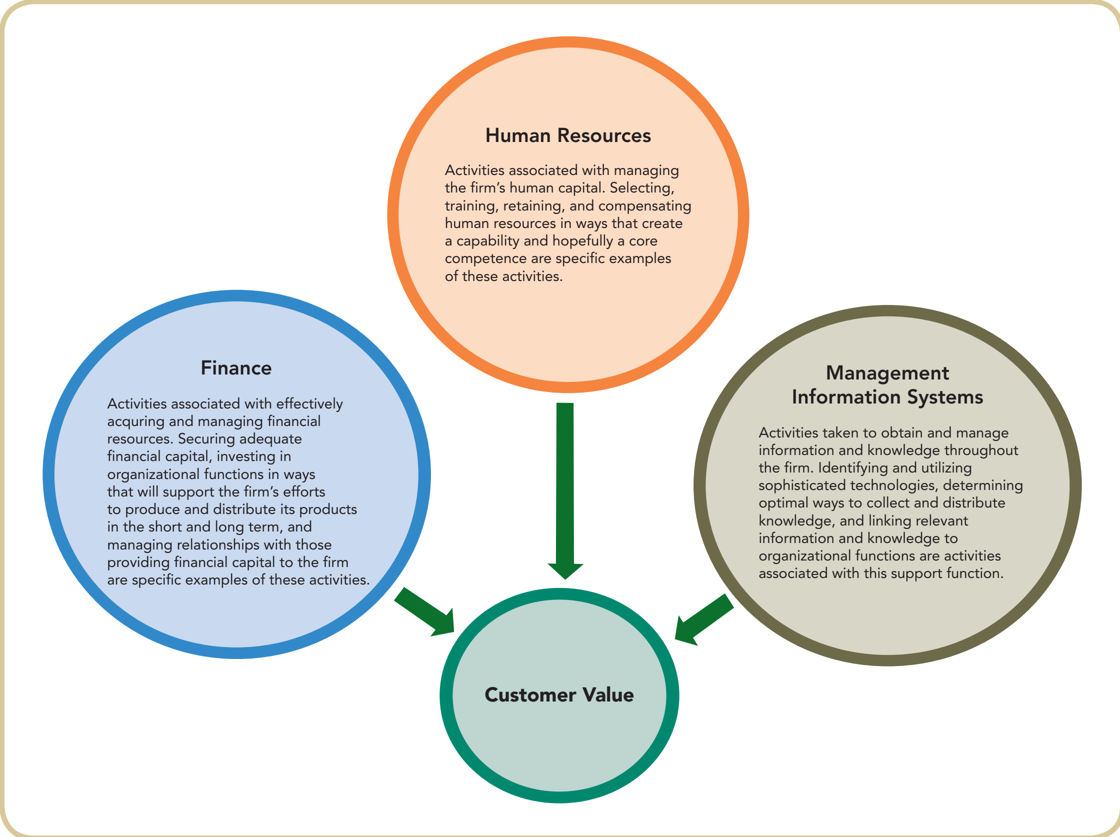


Creating value for customers by completing activities that are part of the value chain often requires building effective alliances with suppliers (and sometimes others to which the firm outsources activities, as discussed in the next section) and developing strong positive relationships with customers. When firms have strong positive relationships with suppliers and customers, they are said to have social capital.[86] The relationships themselves have value because they lead to transfers of knowledge as well as to access to resources that a firm may not hold internally.[87] To build social capital whereby resources such as knowledge are transferred across organizations requires trust between partners. Indeed, partners must trust each other to allow their resources to be used in such a way that both parties will benefit over time while neither party will take advantage of the other.[88]

Evaluating a firm's capability to execute its value chain activities and support functions is challenging. Earlier in the chapter, we noted that identifying and assessing the value of a firm's resources and capabilities requires judgment. Judgment is equally necessary when using value chain analysis, because no obviously correct model or rule is universally available to help in the process.

What should a firm do about value chain activities and support functions in which its resources and capabilities are not a source of core competence? Outsourcing is one solution to consider.

Figure 3.5 Creating Value through Support Functions



3-4 Outsourcing

Concerned with how components, finished goods, or services will be obtained, **outsourcing** is the purchase of a value-creating activity or a support function activity from an external supplier. Not-for-profit agencies as well as for-profit organizations actively engage in outsourcing.[89] Firms engaging in effective outsourcing increase their flexibility, mitigate risks, and reduce their capital investments.[90] Moreover, in some industries virtually all firms seek the value that can be captured through effective outsourcing. However, as is the case with other strategic management process decisions, careful analysis is required before the firm decides to outsource.[91] And if outsourcing is to be used, firms must recognize that only activities where they cannot create value or where they are at a substantial disadvantage compared to competitors should be outsourced.[92] Experience suggests that virtually any activity associated with the value chain functions or the support functions may fall into this category. We discuss different activities that some firms outsource in the Strategic Focus. We also consider core competencies that firms to whom others outsource activities may try to develop to satisfy customers' future outsourcing needs.

Outsourcing can be effective because few, if any, organizations possess the resources and capabilities required to achieve competitive superiority in each value chain activity and support function. For example, research suggests that few companies can afford to internally develop all the technologies that might lead to competitive advantage.[93] By

Outsourcing is the purchase of a value-creating activity or a support function activity from an external supplier.

nurturing a smaller number of capabilities, a firm increases the probability of developing core competencies and achieving a competitive advantage because it does not become overextended. In addition, by outsourcing activities in which it lacks competence, the firm can fully concentrate on those areas in which it has the potential to create value.

There are concerns associated with outsourcing.[94] Two significant ones are the potential loss in a firm's ability to innovate and the loss of jobs within the focal firm. When evaluating the possibility of outsourcing, firms should anticipate possible effects on their ability to innovate in the future as well as the impact of losing some of their human capital. On the other hand, firms are sometimes able to enhance their own innovation capabilities by studying how the companies to which they've outsourced complete those activities.[95] Because a focal firm likely knows less about a foreign company to which it chooses to outsource, concerns about potential negative outsourcing effects in these cases may be particularly acute, requiring careful study and analysis as a result.[96] Deciding to outsource to a foreign supplier is commonly called *offshoring*.

3-5 Competencies, Strengths, Weaknesses, and Strategic Decisions

By analyzing the internal organization, firms identify their strengths and weaknesses as reflected by their resources, capabilities, and core competencies. If a firm has weak capabilities or does not have core competencies in areas required to achieve a competitive advantage, it must acquire those resources and build the needed capabilities and competencies.

As noted in the Strategic Focus, some firms decide to outsource a function or activity where it is weak in order to improve its ability to use its remaining resources to create value. Many financial institutions are outsourcing functions that support cashless transaction because their IT systems cannot handle these activities efficiently. Some governments are outsourcing services to increase the quality and efficiency with which the services are delivered (e.g., U.K. outsourcing some surgeries to French healthcare providers). Outsourcing decisions must be made carefully, considering all of the options. However, when done effectively, outsourcing can provide access to needed resources.

In considering the results of examining the firm's internal organization, managers should understand that having a significant quantity of resources is not the same as having the "right" resources. The "right" resources are those with the potential to be formed into core competencies as the foundation for creating value for customers and developing competitive advantages because of doing so. Interestingly, decision makers sometimes become more focused and productive when seeking to find the right resources when the firm's total set of resources is constrained.[97]

Tools such as outsourcing help the firm focus on its core competencies as the source of its competitive advantages. However, evidence shows that the value-creating ability of core competencies should never be taken for granted. Moreover, the ability of a core competence to be a permanent competitive advantage can't be assumed. The reason for these cautions is that all core competencies have the potential to become *core rigidities*.[98] Typically, events occurring in the firm's external environment create conditions through which core competencies can become core rigidities, generate inertia, and stifle innovation.[99]

After studying its external environment to determine what it *might choose to do* (as explained in Chapter 2) and its internal organization to understand what it *can do* (as explained in this chapter), the firm has the information required to select a business-level strategy that it will use to compete against rivals. We describe different business-level strategies in the next chapter.

Strategic Focus

The Extreme Specialization of Outsourcing: Who Is Doing It and Who Is Not?

Outsourcing activities and functions has been growing dramatically over the last decade. With the election of Donald Trump, companies in some industries—particularly manufacturing—have reduced their outsourcing outside of the United States for fear of government actions against them. However, outsourcing remains strong in other sectors of the economy.

As we discussed in the Opening Case, big pharma companies are using some of their resources and capabilities to develop "big data analytics" as a core competence because of the value of these analytics to these firms. In contrast, these same firms are outsourcing drug safety processes and procedures to other firms, many of which are located in India or have offices located there. In fact, monitoring drug safety is "one of outsourcing's newest frontiers, and the now $2 billion business is booming as regulators require closer tracking of rare side effects and interactions between medicines." Accenture, Cognizant, and Tata Consultancy Services Ltd. are some of the firms to which big pharma companies AstraZeneca PLC, Novartis AG, and Bristol-Myers Squibb Co. are outsourcing the monitoring of drug safety. Thus, the big pharma firms have decided that data analytics processes are an activity in which they can capture value while monitoring drug safety is not.

Similar examples exist within firms competing in other industries. Deutsche Bank has outsourced some data center services to Hewlett-Packard; however, it is retaining control over certain technology application areas it believes are proprietary and, as such, are core competencies through which the firm creates value. In fact, outsourcing information technology activities has been growing in banking and the financial sector. This is due to the rapid move to cashless transaction and mobile banking. Many of the banks have "legacy" information technology systems that are difficult to change over to handle these new functions. As such, they are outsourcing many activities such as commercial credit card payments to what is referred to as fintech firms. The number of these specialized fintech firms is growing dramatically because of the increasing amount of cashless transactions and the need for help by banks and other financial institutions such as credit unions.

Interestingly, government has become a major outsourcer. Governments are trying to outsource the provision of services from government agencies to private and non-profit organizations who can perform the services more efficiently and with higher quality. In fact, even the British Health Service is outsourcing some health services (e.g., surgeries) to healthcare organizations in other European countries (e.g., France), trying to manage its own backlog of requests for healthcare services.

Wipro and Infosys have historically been successful as firms to whom others outsource activities. However, this success has been largely a product of being able to employ relatively inexpensive programmers to complete tasks lacking significant amounts of complexity. The technology service needs have become more sophisticated and challenging. And, with the reductions of outsourcing in some sectors, some of these firms are struggling. For example, Infosys and Cognizant have laid off many employees in India and Infosys is trying to establish operations in the United States.

Stuart Forster/Alamy Stock Photo

These individuals are working in a firm to which other companies have outsourced certain activities for completion.

Therefore, the nature of outsourcing is changing and firms are becoming more specialized. Additionally, some industries are outsourcing less (e.g., manufacturing) and others are outsourcing more (financial institutions). Nevertheless, outsourcing remains a critical means for firms to gain access to valuable resources that they need to seize and maintain a competitive advantage.

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SUMMARY

- In the current competitive landscape, the most effective organizations recognize that strategic competitiveness and above-average returns result only when core competencies (identified by studying the firm's internal organization) are matched with opportunities (determined by studying the firm's external environment).
- No competitive advantage lasts forever. Over time, rivals use their own unique resources, capabilities, and core competencies to form different value-creating propositions that duplicate the focal firm's ability to create value for customers. Because competitive advantages are not permanently sustainable, firms must exploit their current advantages while simultaneously using their resources and capabilities to form new advantages that can lead to future competitive success.
- Effectively managing core competencies requires careful analysis of the firm's resources (inputs to the production process) and capabilities (resources that have been purposely integrated to achieve a specific task or set of tasks). The knowledge the firm's human capital possesses is among the most significant of an organization's capabilities and ultimately provides the base for most competitive advantages. The firm must create an organizational culture that allows people to integrate their individual knowledge with that held by others so that, collectively, the firm has a significant amount of value-creating organizational knowledge.
- Capabilities are a more likely source of core competence and subsequently of competitive advantages than are individual resources. How a firm nurtures and supports its capabilities to become core competencies is less visible to rivals, making efforts to understand and imitate the focal firm's capabilities difficult.
- Only when a capability is valuable, rare, costly to imitate, and nonsubstitutable is it a core competence and a source of competitive advantage. Over time, core competencies must be supported, but they cannot be allowed to become core rigidities. Core competencies are a source of competitive advantage only when they allow the firm to create value by exploiting opportunities in its external environment. When this is no longer possible, the company shifts its attention to forming other capabilities that satisfy the four criteria of sustainable competitive advantage.
- Value chain analysis is used to identify and evaluate the competitive potential of resources and capabilities. By studying their skills relative to those associated with value chain activities and support functions, firms can understand their cost structure and identify the activities through which they are able to create value.
- When the firm cannot create value in either a value chain activity or a support function, outsourcing is considered. Used commonly in the global economy, outsourcing is the purchase of a value-creating activity from an external supplier. The firm should outsource only to companies possessing a competitive advantage in terms of the particular value chain activity or support function under consideration. In addition, the firm must continuously verify that it is not outsourcing activities through which it could create value.

KEY TERMS

costly-to-imitate capabilities 88
global mind-set 77
intangible resources 82
nonsubstitutable capabilities 89
outsourcing 93
rare capabilities 88
support functions 91
tangible resources 82
valuable capabilities 88
value 78
value chain activities 91

REVIEW QUESTIONS

1. Why is it important for a firm to study and understand its internal organization?
2. What is value? Why is it critical for the firm to create value? How does it do so?
3. What are the differences between tangible and intangible resources? Why is it important for decision makers to understand these differences? Are tangible resources more valuable for creating capabilities than are intangible resources, or is the reverse true? Why?
4. What are capabilities? How do firms create capabilities?
5. What four criteria must capabilities satisfy for them to become core competencies? Why is it important for firms to

use these criteria to evaluate their capabilities' value-creating potential?

6. What is value chain analysis? What does the firm gain by successfully using this tool?

7. What is outsourcing? Why do firms outsource?

8. How do firms identify internal strengths and weaknesses? Why is it vital that managers have a clear understanding of their firm's strengths and weaknesses?

9. What are core rigidities? What does it mean to say that each core competence could become a core rigidity?

Mini-Case

Is Strengthening the Superdry Brand a Foundation to Strategic Success?

British-based SuperGroup, owner of Superdry and its carefully banded product lines, is taking actions to deal with recent performance problems. These problems manifested themselves in various ways, including the need for the firm to issue three profit warnings in one six-month period and a 34 percent decline in the price of its stock in 2014 compared to 2013.

Founded in 1985, the firm is recognized as a distinctive, branded fashion retailer selling quality clothing and accessories. In fact, the firm says that "the Superdry brand is at the heart of the business." The brand is targeted to discerning customers who seek to purchase "stylish clothing that is uniquely designed and well made." In this sense, the company believes that its men's and women's products have "wide appeal, capturing elements of 'urban' and 'streetwear' designs with subtle combinations of vintage Americana, Japanese imagery, and British tailoring, all with strong attention to detail." Thus, the firm's brand is critical to the image it conveys with its historical target customer—teens and those in their early twenties. Those leading SuperGroup believe that customers love the Superdry products as well as the "theatre and personality" of the stores in which they are sold. These outcomes are important given the company's intention of providing customers with "personalized shopping experiences that enhance the brand rather than just selling clothes."

As noted above, problems have affected the firm's performance. What the firm wants to do, of course, is correct the problems before the Superdry brand is damaged. Management turmoil is one of the firm's problems. In January of 2015, the CEO abruptly left. Almost simultaneously, the CFO was suspended for filing for personal bankruptcy, and the Chief Operating Officer left to explore other options. Some analysts believe that the firm's growth had been ill-conceived, signaling the possibility of ineffective strategic decisions on the part of the firm's upper-level leaders. As one analyst said: "The issue with SuperGroup is that they've expanded too quickly, without the supporting infrastructure."

Efforts are now underway to address these problems. In particular, those now leading SuperGroup intend to better control the firm as a means of protecting the value of its brand. A new CEO has been appointed who believes that "the business is very much more in control" today than has been the case recently. A well-regarded interim CFO has been appointed, and the firm's board has been strengthened by added experienced individuals. Commenting about these changes, an observer said that SuperGroup has "moved from an owner-entrepreneurial style of management to a more professional and experienced type of management. The key thing is, it is much better now than it was."

Direct actions are also being taken to enhance the Superdry brand. The appointment of Idris Elba, actor from *The Wire*, is seen as a major attempt to reignite the brand's image. In fact, SuperGroup says that Elba epitomizes what the Superdry brand is—British, grounded, and cool. The thinking here, too, is that Elba, who at the time of his selection was 42, would appeal to the customer who was "growing up" with the Superdry brand. For these customers, who are 25 and older, SuperGroup is developing Superdry products with less dramatic presentations of the brand's well-known large logos. Additional lines of clothing, for skiing and rugby for example, are being developed for the more mature Superdry customer. After correcting the recently encountered problems, SuperGroup intends to expand into additional markets, including China. In every instance though, the firm will protect the brand when entering new competitive arenas and will rely on it as the foundation for intended success.

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Case Discussion Questions

1. What influences from the external environment over the next several years do you think might affect SuperDry's ability to compete?
2. Does Superdry have one or more capabilities that are valuable, rare, costly to imitate, and nonsubstitutable? If so, what are they? If not, on which criteria do they fall short?
3. Will the actions that Superdry is taking solve its problems? Why or why not?
4. What value does Superdry create for its customers?
5. What actions would you recommend the management of Superdry take to resolve its problems and turn around the performance of the firm?

NOTES

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