

# Business Strategy: Differentiation, Cost Leadership, and Blue Oceans

# **Chapter Outline**

- **6.1** Business-Level Strategy: How to Compete for Advantage
  Strategic Position
  Generic Business Strategies
- **6.2** Differentiation Strategy: Understanding Value Drivers

  Product Features
  Customer Service
  Complements
- 6.3 Cost-Leadership Strategy: Understanding
  Cost Drivers
  Cost of Input Factors
  Economies of Scale
  Learning Curve
  Experience Curve
- **6.4** Business-Level Strategy and the Five Forces: Benefits and Risks Differentiation Strategy: Benefits and Risks Cost-Leodership Strategy: Benefits and Risks
- 6.5 Blue Ocean Strategy: Combining
  Differentiation and Cost Leadership
  Value Innovation
  Blue Ocean Strategy Gone Bad: "Stuck in the Middle"
- 6.6 Implications for Strategic Leaders

# **Learning Objectives**

#### After studying this chapter, you should be able to:

- LO 6-1 Define business-level strategy and describe how it determines a firm's strategic position.
- **LO 6-2** Examine the relationship between value drivers and differentiation strategy.
- **LO 6-3** Examine the relationship between cost drivers and cost-leadership strategy.
- LO 6-4 Assess the benefits and risks of differentiation and cost-leadership strategies vis-à-vis the five forces that shape competition.
- LO 6-5 Evaluate value and cost drivers that may allow a firm to pursue a blue ocean strategy.
- LO 6-6 Assess the risks of a blue ocean strategy, and explain why it is difficult to succeed at value innovation.

# JetBlue Airways: En Route to a New Blue Ocean?

in 2019, JETBLUE AIRWAYS became the sixth-largest airline in the United States, following the "big four" (American, Delta, Southwest, and United) and Alaska Airlines, which beat out JetBlue in acquiring Virgin America in 2016. JetBlue offers approximately 1,000 flights daily, employs 22,000 crew members, and services 42 million customers annually.

When JetBlue took to the skies in 2000, founder David Neeleman set out to pursue a blue ocean strategy. This type

of competitive strategy combines differentiation and cost-leadership activities. To reconcile the inherent trade-offs in these two distinct strategic positions, it used value innovation. How did Neeleman accomplish this strategy and where did his ideas come from?

At the age of 25, the young entrepreneur cofounded Morris Air, a charter air service that was purchased by Southwest Airlines (SWA) in 1993. Morris Air was a

In an attempt to differentiate its service offering, JetBlue provides its Mint tuxury experience, which includes a lie-flat bed up to 6 feet 8 inches long, a high-resolution personal screen, and free in-flight high-speed Wi-Fi, on many domestic U.S. routes, Other U.S. competitors offer such amenities only on a few selected routes.

Carlosyudica/123RF

low-fare airline that pioneered many cost-saving practices that later became standard in the industry, such as e-ticketing. After a stint as an airline executive for SWA, Neeleman went on to launch JetBlue. His strategy was to provide air travel at even lower costs than SWA. At the same time, he wanted to offer service and amenities that were better and more than those offered by such legacy carriers as American, Delta, and United. According to JetBlue's Customer Bill of Rights, its primary mission is to bring humanity back to air travel.

To implement a blue ocean strategy, JetBlue focused on lowering operating costs while driving up perceived customer value in its service offerings. Specifically, it copied and improved upon many of SWA's cost-reducing activities. It used just one type of airplane (the Airbus A-320) to lower the costs of aircraft maintenance and pilot and crew training (but has since expanded its fleet). It also specialized in transcontinental flights connecting the East Coast (from its home base in New York) to the West Coast (e.g., Los Angeles). This model, known as the point-to-point model, focuses on directly connecting fewer but more highly trafficked city pairs, unlike American, Delta, and United's hub-and-spoke system, which connects many different locations via layovers at airport hubs. JetBlue's point-to-point model lowers costs in mainly two ways: flying longer distances and transporting more passengers per

flight than SWA, further driving down its costs. As a consequence, Jet-Blue enjoys one of the lowest cost per available seat-mile (an important performance metric in the airline industry) in the United States.

To enhance its differential appeal, JetBlue drove up its perceived value by implementing its mantra: combining hightouch—to enhance the customer experience—and high-tech—to drive down costs. JetBlue also had a highly functional website for making reser-

vations and planning other travel-related services. But because research showed that roughly one-third of customers prefer speaking to live reservation agents, it decided to add live agents, all of whom were U.S.-based, work-from-home employees rather than outsourced ones, as per the industry best practice.

To further enhance its value for customers, JetBlue added to its fleet high-end, 100-seat Embraer regional jets—each equipped with leather seats, free movie and television programming via DirecTV, and XM Satellite Radio, and each staffed with friendly and attentive on-board service attendants. Additional amenities included its Mint class, a luxury version of first-class travel featuring small private

suites with lie-flat beds of up to 6 feet 8 inches long, a high-resolution personal viewing screen offering a large library of free and on-demand movies, live TV, and free in-flight high-speed Wi-Fi ("Fly-Fi"). JetBlue also offered personal check-in and early boarding, free bag check and priority bag retrieval after flight, and complimentary gourmet food and alcoholic beverages in flight.

In its early years, pursuing a blue ocean strategy by combining a cost-leadership position with a differentiation strategy resulted in a competitive advantage. JetBlue used value innovation to drive up perceived customer value even while lowering operating costs. This approach can work when an airline is small and connecting a few highly profitable city routes. However, it is quite difficult to implement because it involves simultaneous execution of cost-leadership and differentiation activities—two very distinct strategic strategies. Pursuing them simultaneously results in trade-offs that work against each other. For instance, higher perceived customer value (e.g., by providing leather seats and free Wi-Fi throughout the entire aircraft) comes with higher costs. These trade-offs eventually caught up with JetBlue.

Between 2007 and 2015, the airline faced several highprofile mishaps (e.g., emergency landings and erratic pilot and crew behaviors). Following the 2007 "snowmageddon," when JetBlue was forced to cancel about 1,600 flights and passengers were stranded for up to nine hours sitting on the tarmac aboard full airplanes, the board removed founder Neeleman as CEO and replaced him with David Barger, formerly JetBlue's chief operating officer. These public relations nightmares compounded the fundamental difficulty of resolving the need to limit costs while providing superior customer service and in-flight amenities. Meanwhile, Barger was unable to overcome JctBlue's competitive disadvantage; by 2015, the airline was lagging the Dow Jones U.S. Airline Index by more than 180 percentage points. In that same year, JetBiue's board replaced Barger, appointing Robin Hayes, who had been with British Airways for almost 20 years, as the new CEO.

JetBlue's situation went from bad to worse. In 2017, Jet-Blue ranked dead last in the annual WSJ survey of U.S. airlines based on objective data such as on-time arrival, tarmac and flight delays, cancelled flights, involuntary bumping of passengers, mishandled bags, and numerous other customer complaints.

So Hayes set out to sharpen JetBlue's strategic profile, doubling down on its blue ocean strategy. He attempted once again to lower operating costs while increasing perceived value creation. To drive down costs, he decided to add more seats to each plane, reducing legroom in coach (now on par with the legacy carriers). He identified other cost-savings opportunities, mainly in aircraft maintenance and crew scheduling. At the same time, Hayes also expanded its Mint class service to many more flights, providing a product that customers loved and some other airlines lacked. JetBlue also added a new airplane, the Airbus A-321, to its fleet, which scores significantly higher in customer satisfaction surveys than the older A-320.1

Part II of this ChapterCase appears in Section 6.6.

THE CHAPTERCASE illustrates how JetBlue ran into trouble by pursuing two different business strategies at the same time—a cost-leadership strategy, focused on low cost, and a differentiation strategy, focused on delivering unique features and service. Although the idea of combining different business strategies seems appealing, it is quite difficult to execute a cost-leadership and differentiation position at the same time. This is because cost leadership and differentiation are distinct strategic positions. Pursuing them simultaneously results in trade-offs that work against each other. Providing higher perceived customer value tends to generate higher costs.

Many firms that attempt to combine cost-leadership and differentiation strategies end up being stuck in the middle. In this situation, strategic leaders have failed to carve out a clear strategic position. In their attempt to be everything to everybody, these firms end up being neither a low-cost leader nor a differentiator (thus the phrase stuck in the middle between the two distinct strategic positions). This common strategic failure contributed to JetBlue's sustained competitive disadvantage from 2007 to 2019. Strategic leaders need to be aware to avoid being stuck in the middle between distinct business strategies. A clear strategic position—either as differentiator or low-cost leader—is more likely to form the

basis for competitive advantage. Although quite attractive at first glance, a blue ocean strategy is difficult to implement because of the trade-offs between the two distinct strategic positions (low-cost leadership and differentiation), unless the firm is successful in value innovation that allows a reconciliation of these inherent trade-offs (discussed in detail later).

This chapter, the first in Part 2 on strategy formulation, takes a close look at business-level strategy, frequently also referred to as competitive strategy. It deals with how to compete for advantage. Based on the analysis of the external and internal environments (presented in Part 1), the second step in the AFI Strategy Framework is to formulate a business strategy that enhances the firm's chances of achieving a competitive advantage.

We begin our discussion of strategy formulation by defining business-level strategy, strategic position, and generic business strategies. We then look at two key generic business strategies: differentiation and cost leadership. We pay special attention to value and cost drivers that managers can use to carve out a clear strategic profile. Next, we relate the two business-level strategies to the external environment, in particular, to the five forces, to highlight their respective benefits and risks. We then introduce the notion of blue ocean strategy—using value innovation to combine a differentiation and cost-leadership strategic position. We also look at changes in competitive positioning over time before concluding with practical Implications for Strategic Leaders.

# 6.1 Business-Level Strategy: How to Compete for Advantage

Business-level strategy details the goal-directed actions managers take in their quest for competitive advantage when competing in a single product market.<sup>2</sup> It may involve a single product or a group of similar products that use the same distribution channel. It concerns the broad question, "How should we compete?" To formulate an appropriate business-level strategy, managers must answer the who, what, why, and how questions of competition:

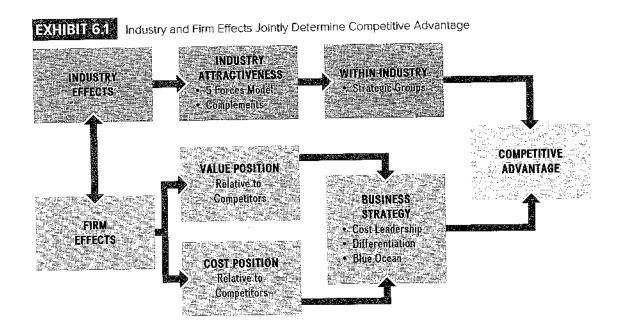
- Who are the customer segments we will serve?
- What customer needs, wishes, and desires will we satisfy?
- Why do we want to satisfy them?
- How will we satisfy them?<sup>3</sup>

To formulate an effective business strategy, managers need to keep in mind that competitive advantage is determined jointly by industry and firm effects. As shown in Exhibit 6.1, one route to competitive advantage is shaped by industry effects, while a second route is determined by firm effects. As discussed in Chapter 3, an industry's profit potential can be assessed using the five forces framework plus the availability of complements. Managers need to be certain that the business strategy is aligned with the five forces that shape competition. They can evaluate performance differences among clusters of firms in the same industry by conducting a strategic-group analysis. The concepts introduced in Chapter 4 are key in understanding firm effects because they allow us to look inside firms and explain why they differ based on their resources, capabilities, and competencies. It is also important to note that industry and firm effects are not independent, but rather they are interdependent, as shown by the two-pointed arrow connecting industry effects and firm effects in Exhibit 6.1. At the firm level, performance is determined by value and cost positions relative to competitors. This is the firm's strategic position, to which we turn next.

# LO 10-1

Define business-level strategy and describe how it determines a firm's strategic position.

business-level strategy The goaldirected actions managers take in their quest for competitive advantage when competing in a single product market.



#### STRATEGIC POSITION

We noted in Chapter 5 that competitive advantage is based on the difference between the perceived value a firm is able to create for consumers (V), captured by how much consumers are willing to pay for a product or service, and the total cost (C) the firm incurs to create that value. The greater the economic value created (V-C), the greater is a firm's potential for competitive advantage. To answer the business-level strategy question of how to compete, managers have two primary competitive levers at their disposal: value (V) and cost (C).

A firm's business-level strategy determines its *strategic position*—its strategic profile based on value creation and cost—in a specific product market. A firm attempts to stake out a valuable and unique position that meets customer needs while simultaneously creating as large a gap as possible between the value the firm's product creates and the cost required to produce it. Higher value creation tends to require higher cost. To achieve a desired strategic position, managers must make strategic trade-offs—choices between a cost *or* value position. Managers must address the tension between value creation and the pressure to keep cost in check so as not to erode the firm's economic value creation and profit margin.

As shown in the ChapterCase, JetBlue experienced a competitive disadvantage for a number of years because it was unable to effectively address the strategic trade-offs inherent in pursuing a cost-leadership and differentiation strategy at the same time. A business strategy is more likely to lead to a competitive advantage if a firm has a clear strategic profile, either as differentiator or a low-cost leader. A blue ocean strategy is only successful, in contrast, if the firm can implement some type of value innovation that reconciles the inherent trade-off between value creation and underlying costs.

#### generic business strategies

There are two fundamentally different generic business strategies—differentiation and cost leadership. A differentiation strategy seeks to create higher value for customers than the value that competitors create, by delivering products or services with unique features while

#### strategic trade-offs

Choices between a cost or value position. Such choices are necessary because higher value creation tends to generate higher cost.

strategy Generic business strategy that seeks to create higher value for customers

differentiation

value for customers than the value that competitors create, while containing costs. keeping costs at the same or similar levels, allowing the firm to charge higher prices to its customers. A cost-leadership strategy, in contrast, seeks to create the same or similar value for customers by delivering products or services at a lower cost than competitors, enabling the firm to offer lower prices to its customers.

These two business strategies are called *generic strategies* because they can be used by any organization—manufacturing or service, large or small, for-profit or nonprofit, public or private, domestic or foreign—in the quest for competitive advantage, independent of industry context. Differentiation and cost leadership require distinct strategic positions, and in turn increase a firm's chances to gain and sustain a competitive advantage. Because value creation and cost tend to be positively correlated, however, important trade-offs exist between value creation and low cost. A business strategy, therefore, is more likely to lead to a competitive advantage if it allows a firm to either *perform similar activities differently* or *perform different activities* than its rivals that result in creating more value or offering similar products or services at lower cost.<sup>5</sup>

When considering different business strategies, strategic leaders also must define the scope of competition—whether to pursue a specific, narrow part of the market or go after the broader market. The automobile industry provides an example of the scope of competition. Alfred P. Sloan, longtime president and CEO of GM, defined the carmaker's mission as providing a car for every purse and purpose. GM was one of the first to implement a multi-divisional structure in order to separate the brands into strategic business units, allowing each brand to create its unique strategic position (with its own profit and loss responsibility) within the broad automotive market. For example, GM's product lineup ranges from the low-cost-positioned Chevy brand to the differentiated Cadillac brand. In this case, Chevy is pursuing a broad cost-leadership strategy, while Cadillac is pursuing a broad differentiation strategy. The two different business strategies are integrated at the corporate level at GM (more on corporate strategy in Chapters 8 and 9).

On the other hand, Tesla, the maker of all-electric cars (featured in ChapterCase 1), offers a highly differentiated product and pursues only a small market segment. At this point, it uses a *focused differentiation strategy*. In particular, Tesla focuses on environmentally

conscious consumers that want to drive a high-performance car and who are willing to pay a premium price. Going forward, Tesla is hoping to broaden its competitive scope with its Model 3, priced at roughly half of the Model S sedan and Model X sport utility crossover. Moreover, Elon Musk hopes the Tesla Model Y (a smaller, compact SUV) will sell even better than the Model 3. Taken together, GM's competitive scope is broad—with a focus on the mass automotive market—while Tesla's competitive scope is narrow—with a focus on all-electric luxury cars.

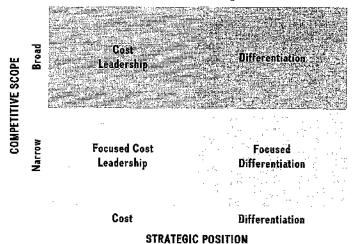
Now we can combine the dimensions describing a firm's strategic position (differentiation versus cost) with the scope of competition (narrow versus broad). As shown in Exhibit 6.2, by doing so we get the two major broad business strategies (cost leadership and differentiation), shown as the top two boxes in the matrix, and the focused version of each, shown as the

cost-leadership strategy Generic business strategy that seeks to create the same or similar value for customers at a lower cost.

scope of competition
The size—narrow or
broad—of the market in
which a firm chooses
to compete.

# EXHIBIT 6.2

Strategic Position and Competitive Scope: Generic Business Strategies



Source: Adapted from M.E. Porter (1980), Competitive Strategy. Techniques for Analyzing Industries and Campetitors (New York: Free Press). focused cost-leadership strategy Same as the cost-leadership strategy except with a narrow focus on a niche market.

focused differentiation strategy Same as the differentiation strategy except with a narrow focus on a niche market. bottom two boxes in the matrix. The focused versions of the two business strategies—focused cost-leadership strategy and focused differentiation strategy—are essentially the same as the broad generic strategies except that the competitive scope is narrower. For example, the manufacturing company BIC pursues a focused cost-leadership strategy, designing and producing disposable pens and cigarette lighters at a low cost, while Mont Blanc pursues a focused differentiation strategy, offering exquisite pens—what it calls "writing instruments"—frequently priced at several hundred dollars.

As discussed in ChapterCase 6, JetBlue attempts to combine a focused cost-leadership position with a focused differentiation position. Although initially successful, for the last several years, JetBlue has been consistently outperformed by airlines that do not attempt to straddle different strategic positions, but rather have clear strategic profiles as either differentiators or low-cost leaders. For example, Southwest Airlines competes clearly as a broad cost leader (and would be placed squarely in the upper-left quadrant of Exhibit 6.2). The legacy carriers-Delta, American, and United-all compete as broad differentiators (and would be placed in the upper-right quadrant). Regionally, we find smaller airlines that are ultra low cost, such as Allegiant Air, Frontier Airlines, and Spirit Airlines, with very clear strategic positions. These smaller airlines would be placed in the lower-left quadrant of Exhibit 6.2 because they are pursuing a focused cost-leadership strategy. Based on a clear strategic position, these airlines have outperformed JetBlue over many years. JetBlue appears to be stuck between different strategic positions, trying to combine a focused costleadership position with focused differentiation. And, as the airline grew, the problems inherent in attempting to combine different strategic positions also grew-and more severe at that because of its attempt to also straddle the (broad) cost-leadership position with the (broad) differentiation position. In essence, JetBlue was trying to be everything to everybody. Being stuck in the middle of different strategic positions is a recipe for inferior performance and competitive disadvantage-and this is exactly what JetBlue experienced between 2007 and 2019, when it underperformed the Dow Jones Airlines Index, lagging behind the big four airlines (American, Delta, Southwest, and United) as well as smaller airlines such as Alaska Airlines, Allegiant Air, and Spirit.

#### LO 6-2

Examine the relationship between value drivers and differentiation strategy.

# 6.2 Differentiation Strategy: Understanding Value Drivers

The goal of a differentiation strategy is to add unique features that will increase the perceived value of goods and services in the minds of consumers so they are willing to pay a higher price. Ideally, a firm following a differentiation strategy aims to achieve in the minds of consumers a level of value creation that its competitors cannot easily match. The focus of competition in a differentiation strategy tends to be on unique product features, service, and new product launches, or on marketing and promotion rather than price.

Several competitors in the bottled-water industry provide a prime example of pursuing a successful differentiation strategy. As more and more consumers shift from carbonated soft drinks to healthier choices, the industry for bottled water is booming—growing about 10 percent per year. In the United States, the per person consumption of bottled water surpassed that of carbonated soft drinks for the first time in 2016. Such a fast-growing industry provides ample opportunity for differentiation. In particular, the industry is split into two broad segments depending on the sales price. Bottled water with a sticker price of \$1.30 or less per 32 ounces (close to one liter) is considered low-end, while those with a higher price tag are seen as luxury items. For example, PepsiCo's Aquafina and Coca-Cola's Dasani are considered low-end products, selling purified tap water at low prices, often in bulk at big-box

retailers such as Walmart. On the premium end, PepsiCo introduced Lifewtr with a splashy ad during Super Bowl LI in 2017, while Jennifer Aniston markets Smartwater, Coca-Cola's premium water.

The idea of selling premium water is not new, however. Evian (owned by Danone, a French consumer products company) and S.Pellegrino (owned by Nestlé of Switzerland) have long focused on differentiating their products by emphasizing the uniqueness of their respective natural sources (Evian hails from the French Alps while Pellegrino comes from San Pellegrino Terme in Italy's Lombardy region). Recent entrants into the luxury segment for bottled water have taken the differentiation of their products to new heights. Some purveyors, such as Svalbardi, are able to charge super premium prices. At upscale retailer Harrods in London, a bottle of Svalbardi costs about \$100 for 25 ounces; the water, sold in a heavy glass bottle, hails from Norwegian ice-bergs some 4,000 years old. Ordering premium bottled water in



Anythings/Shutterstock

the United States to accompany lunch has become a status symbol. Indeed, many restaurants now feature water lists besides the more traditional wine selection. "Energy waters" enhanced with minerals and vitamins are the fastest growing segment. Although flavored waters make up less than 5 percent of the overall market for bottled water, they rack up 15 percent of total revenues. And this is nothing to be snuffed at: The market for bottled water globally reached some \$150 billion and continues to grow fast. Although a free substitute can be had from most taps in industrialized countries, the success of many luxury brands in the bottled-water industry shows the power of differentiation strategy.

A company that uses a differentiation strategy can achieve a competitive advantage as long as its economic value created (V-C) is greater than that of its competitors. Firm A in Exhibit 6.3 produces a generic commodity. Firm B and Firm C represent two efforts at differentiation. Firm B not only offers greater value than Firm A, but also maintains cost parity. meaning it has the same costs as Firm A. However, even if a firm fails to achieve cost parity (which is often the case because higher value creation tends to go along with higher costs in terms of higher-quality raw materials, research and development, employee training to provide superior customer service, and so on), it can still gain a competitive advantage if its economic value creation exceeds that of its competitors. Firm C represents just such a competitive advantage. For the approach shown either in Firm B or Firm C, economic value creation,  $(V-C)_{p}$  or  $(V-C)_{C}$ , is greater than that of Firm A  $(V-C)_{A}$ . Either Firm B or C, therefore, achieves a competitive advantage because it has a higher value gap over Firm A  $[(V-C)_R > (V-C)_A]$ , or  $(V-C)_C > (V-C)_A$ , which allows it to charge a premium price, reflecting its higher value creation. To complete the relative comparison, although both companies pursue a differentiation strategy, Firm B also has a competitive advantage over Firm C because although both offer identical value, Firm B has lower costs, thus  $(V-C)_{\rm B} > (V-C)_{\rm C}$ 

Although increased value creation is a defining feature of a differentiation strategy, managers must also control costs. Rising costs reduce economic value created and erode profit margins. Indeed, if cost rises too much as the firm attempts to create more perceived value for customers, its value gap shrinks, negating any differentiation advantage. One reason JetBlue could not maintain an initial competitive advantage was because it was unable to keep its costs down sufficiently. JetBlue's current management team put measures in place to lower the airline's cost structure such as charging fees for checked bags and reducing leg space to increase passenger capacity on each of its planes. These cost-saving initiatives should increase its economic value creation.

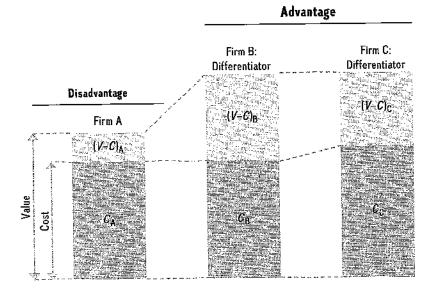
## EXHIBIT 6.3

Differentiation Strategy: Achieving Competitive Advantage

Pursuing a differentiation strategy, firms that successfully differentiate their product can enjoy a competitive advantage, assuming they are able to control costs. Firm A's product is seen as a generic commodity with no unique brand value. Firm B has the same cost structure as Firm A but creates more economic value and thus has a competitive advantage over both Firm A and Firm C because  $(V - C)_n >$  $(V - C)_C > (V - C)_A$ Although, Firm C has higher costs than Firm A and B, it still generates a higher economic value than Firm A.

economies of scope
Savings that come from
producing two (or more)
outputs at less cost than
producing each output
individually, despite using the same resources
and technology.

#### Competitive Position



Although a differentiation strategy is generally associated with premium pricing, strategic leaders have an important second pricing option. When a firm is able to offer a differentiated product or service and can control its costs at the same time, it is able to gain market share from other firms in the industry by charging a similar price but offering more perceived value. By leveraging its differentiated appeal of superior customer service and quality, for example, Marriott offers a line of different hotels: its flagship Marriott full-service business hotel equipped to host large conferences; Residence Inn for extended stay; Marriott Courtyard for business travelers, and Marriott Fairfield Inn for inexpensive leisure and family travel.8 Although these hotels are roughly comparable to competitors in price, they generally offer a higher perceived value. With this line of different hotels, Marriott can benefit from economies of scale and scope, and thus keep its cost structure in check. Economies of scale denote decreases in cost per unit as output increases (more in the next section when we discuss cost-leadership strategy). Economies of scope describe the savings that come from producing two (or more) outputs at less cost than producing each output individually, even though using the same resources and technology. This larger difference between cost and value allows Marriott to achieve greater economic value than its competitors, and thus to gain market share and post superior performance.

Managers can adjust a number of different levers to improve a firm's strategic position. These levers either increase perceived value or decrease costs. Here, we will study the most salient *value drivers* that strategic leaders have at their disposal (we look at cost drivers in the next section). They are

- Product features
- Customer service
- Complements

These value drivers are related to a firm's expertise in, and organization of, different internal value chain activities. Although these are the most important value drivers, no such list can be complete. Applying the concepts introduced in this chapter should allow strategic leaders to identify other important value and cost drivers unique to their business.

When attempting to increase the perceived value of the firm's product or service offerings, managers must remember that the different value drivers contribute to competitive advantage only if their increase in value creation ( $\Delta V$ ) exceeds the increase in costs ( $\Delta C$ ). The condition of  $\Delta V > \Delta C$  must be fulfilled if a differentiation strategy is to strengthen a firm's strategic position and thus enhance its competitive advantage.

#### PRODUCT FEATURES

One of the obvious but most important levers that strategic leaders can adjust is product features, thereby increasing the perceived value of the product or service offering. Adding unique product attributes allows firms to turn commodity products into differentiated products commanding a premium price. Strong R&D capabilities are often needed to create superior product features. In the kitchen-utensil industry, OXO follows a differentiation strategy, highlighting product features. By adhering to its philosophy of making products that are easy to use for the largest variety of possible users, <sup>10</sup> OXO differentiates its kitchen utensils through its patent-protected ergonomically designed soft black rubber grips.

#### CUSTOMER SERVICE

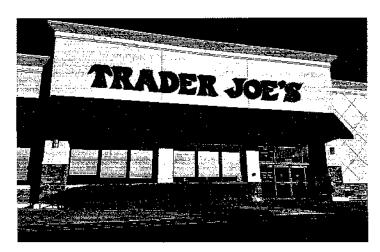
Managers can increase the perceived value of their firms' product or service offerings by focusing on customer service. For example, the online retailer Zappos earned a reputation for superior customer service by offering free shipping both ways: to the customer and for returns. Although several online retailers now offer free shipping both ways, Zappos has done so since its inception in 1999, that is, long before more recent imitators. Perhaps more important, Zappos makes the return process hassle free by providing a link to a prepaid shipping label. All the customer needs to do is drop the box off at the nearby UPS store, all free of charge. Zappos's strategic leaders didn't view free shipping both ways as an additional expense but rather as part of the marketing budget. Moreover, Zappos does not outsource its customer service, and its associates do not use predetermined scripts. They are instead encouraged to build a relationship of trust with each individual customer. Indeed, it

is quite fun to interact with Zappos customer service reps. There seemed to be a good return on investment as word spread through the online shopping community. Competitors took notice, too; Amazon bought Zappos for over \$1 billion.<sup>12</sup>

#### COMPLEMENTS

When studying industry analysis in Chapter 3, we identified the availability of complements as an important force determining the profit potential of an industry. Complements add value to a product or service when they are consumed in tandem. Finding complements, therefore, is an important task for strategic leaders in their quest to enhance the value of their offerings.

A prime example of complements is smartphones and cellular services. A



Trader Joe's has some 475 stores, about half of which are in California and the rest in another 43 states plus Washington, D.C. The chain is known for good products, value for money, and great customer service. As just one example, stores stock local products as requested by their communities.<sup>13</sup>

QualityHD/Shutterstock

smartphone without a service plan is much less useful than one with a data plan. Traditionally, the providers of phones such as Apple, Samsung, and others did not provide wireless services. AT&T and Verizon are by far the two largest service providers in the United States, jointly holding some 70 percent of market share. To enhance the attractiveness of their phone and service bundles, phone makers and service providers frequently sign exclusive deals. When first released, for instance, service for the iPhone was exclusively offered by AT&T. Thus, if you wanted an iPhone, you had to sign up for a two-year service contract with AT&T.

Google, a division of Alphabet, decided to offer the important complements of smartphones and wireless services in-house to attract more customers. Google offers high-end phones such as the Pixel 3 with cutting-edge artificial intelligence built in (via its Google Assistant) at competitive prices. It combines this with discounted high-speed wireless services in its Project Fi, a complementary offering. Working in conjunction with smaller wireless service providers such as T-Mobile (which merged with Sprint), Google provides seamless wireless services by stitching together a nationwide network of services based on available free Wi-Fi hotspots (such as at Starbucks) and cellular networks offered by T-Mobile. This not only enables wide coverage, but also reduces data usage significantly because Google phones automatically switch to free Wi-Fi networks wherever available. In addition, rather than to pay for a predetermined amount of data each month, Google Fi charges users for data use "as they go," that is for actual data consumed without throttling services after consuming the data allowance (as do AT&T and Verizon).

Project Fi is intended to drive more demand for Google's phone; sales have been lackluster thus far. Stronger demand for Google's phones locks more users into the Google ecosystem as its wireless services are available only with its own phones. This provides an example where complementary product and service offerings not only reinforce demand for one another, but also create a situation where network externalities can arise. As more users sign up for Project Fi, Google is able to offer faster and more reliable services through investing more into the latest technology, such as 5G, making its network and with it its Google phones more attractive to more users, and so forth.

In summary, by choosing the differentiation strategy as the strategic position for a product, managers focus their attention on adding value to the product through its unique features that respond to customer preferences, customer service during and after the sale, or effective marketing that communicates the value of the product's features. Although this positioning involves increased costs (for example, higher-quality inputs or innovative research and development activities), customers are generally willing to pay a premium price for the product or service that satisfies their needs and preferences. In the next section, we will discuss how strategic leaders formulate a cost-leadership strategy.

#### LO 6-3

Examine the relationship between cost drivers and cost-leadership strategy.

# 6.3 Cost-Leadership Strategy: Understanding Cost Drivers

The goal of a cost-leadership strategy is to reduce the firm's cost below that of its competitors while offering adequate value. The *cost leader*, as the name implies, focuses its attention and resources on reducing the cost to manufacture a product or on lowering the operating cost to deliver a service in order to offer lower prices to its customers. The cost leader attempts to optimize all of its value chain activities to achieve a low-cost position. Although staking out the lowest-cost position in the industry is the overriding strategic objective, a cost leader still needs to offer products and services of acceptable value. As an example, GM and Korean car manufacturer Kia offer some models that compete directly with one another, yet Kia's cars tend to be produced at lower cost, while providing a similar value proposition.

A cost leader can achieve a competitive advantage as long as its economic value created (V-C) is greater than that of its competitors. Firm A in Exhibit 6.4 produces a product with a cost structure vulnerable to competition. Firms B and C show two different approaches to cost leadership. Firm B achieves a competitive advantage over Firm A because Firm B not only has lower cost than Firm A, but also achieves differentiation parity (meaning it creates the same value as Firm A). As a result, Firm B's economic value creation,  $(V-C)_{\rm B}$ , is greater than that of Firm A,  $(V-C)_{\rm A}$ . For example, as the low-cost leader, Walmart took market share from Kmart, which subsequently filed for bankruptcy.

What if a firm fails to create differentiation parity? Such parity is often hard to achieve because value creation tends to go along with higher costs, and Firm B's strategy is aimed at lower costs. A firm can still gain a competitive advantage as long as its economic value creation exceeds that of its competitors. Firm C represents this approach to cost leadership. Even with lower value (no differentiation parity) but lower cost, Firm C's economic value creation,  $(V-C)_{C}$ , still is greater than that of Firm A,  $(V-C)_{C}$ .

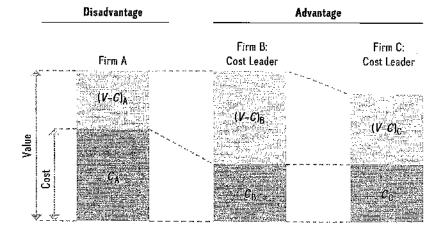
In both approaches to cost leadership in Exhibit 6.4, Firm B's economic value creation is greater than that of Firm A and Firm C. Yet, both firms B and C achieve a competitive advantage over Firm A. Either one can charge prices similar to its competitors and benefit from a greater profit margin per unit, or it can charge lower prices than its competition and gain higher profits from higher volume. Both variations of a cost-leadership strategy can result in competitive advantage. Although Firm B has a competitive advantage over both firms A and C, Firm C has a competitive advantage in comparison to Firm A.

Although companies successful at cost leadership must excel at controlling costs, this doesn't mean that they can neglect value creation. Kia signals the quality of its cars with a five-year, 60,000-mile warranty, one of the more generous warranties in the

### EXHIBIT 6.4. Cost-Leadership Strategy: Achieving Competitive Advantage

Pursuing a cost-leadership strategy, firms that can keep their cost at the lowest point in the industry while offering acceptable value are able to gain a competitive advantage. Firm A has not managed to take advantage of possible cost savings and thus experiences a competitive disadvantage. The offering from Firm B has the same perceived value as Firm A but through more effective cost containment creates more economic value (over both Firm A and Firm C because  $(V-C)_{\mathbb{R}}>(V-C)_{\mathbb{C}}>(V-C)_{\mathbb{A}}$ . The offering from Firm C has a lower perceived value than that of Firm A or B and has the same reduced product cost as with Firm B; as a result, Firm C still generates higher economic value than Firm A.

#### Competitive Position



industry. Walmart offers products of acceptable quality, including many brand-name products.

The most important cost drivers that strategic leaders can manipulate to keep their costs low are

- Cost of input factors.
- Economies of scale.
- Learning-curve effects.
- Experience-curve effects.

However, this list is only a starting point; managers may consider other cost drivers, depending on the situation.

#### COST OF INPUT FACTORS

One of the most basic advantages a firm can have over its rivals is access to lower-cost input factors such as raw materials, capital, labor, and IT services. In the market for international long-distance travel, one of the potent competitive threats facing U.S. legacy carriers—American, Delta, and United—comes from three airlines located in the Persian Gulf states—Emirates, Etihad, and Qatar. These airlines achieve a competitive advantage over their U.S. counterparts thanks to lower-cost inputs—raw materials (access to cheaper fuel), capital (interest-free government loans), labor—and fewer regulations (for example, regarding nighttime take-offs and landings, or in adding new runways and building luxury airports with swimming pools, among other amenities). To benefit from lower-cost IT services, the Gulf carriers also outsource some value chain activities such as booking and online customer service to India. Together, these distinct cost advantages across several key input factors add up to create a greater economic value creation for the Gulf carriers vis-à-vis U.S. competitors, leading to a competitive advantage.

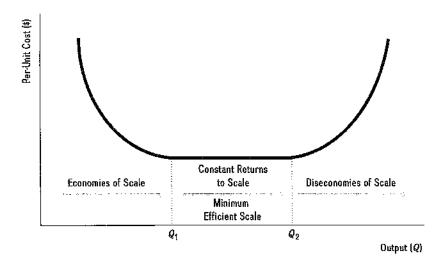
economies of scale Decreases in cost per unit as output increases.

#### **ECONOMIES OF SCALE**

Firms with greater market share might be in a position to reap economies of scale, decreases in cost per unit as output increases. This relationship between unit cost and output is depicted in the first (left-hand) part of Exhibit 6.5: Cost per unit falls as output increases up

### **EXHIBIT 6.5**

Economies of Scale, Minimum Efficient Scale, and Diseconomies of Scale



to point  $Q_1$ . A firm whose output is closer to  $Q_1$  has a cost advantage over other firms with less output. In this sense, bigger is better.

In the airframe-manufacturing industry, for example, reaping economies of scale and learning is critical for cost-competitiveness. The market for commercial airplanes is often not large enough to allow more than one competitor to reach sufficient scale to drive down unit cost. Boeing chose not to compete with Airbus in the market for superjumbo jets; rather, it decided to focus on a smaller, fuel-efficient airplane (the 787 Dreamliner, priced at roughly \$250 million) that allows for long-distance, point-to-point connections. By spring 2019, it had built 800 Dreamliners with more than 600 orders for the new airplane. Boeing can expect to reap significant economies of scale and learning, which will lower per-unit cost. At the same time, Airbus had delivered 290 A-380 superjumbos (sticker price: \$450 million) with 64 orders remaining on its books. 17 If both companies would have chosen to compete head-on in each market segment, the resulting per-unit cost for each airplane would have been much higher because neither could have achieved significant economies of scale (overall their market share split is roughly 50-50).

What causes per-unit cost to drop as output increases (up to point  $Q_1$ )? Economies of scale allow firms to

- Spread their fixed costs over a larger output.
- Employ specialized systems and equipment.
- Take advantage of certain physical properties.

SPREADING FIXED COSTS OVER LARGER OUTPUT. Larger output allows firms to spread their fixed costs over more units. That is why gains in market share are often critical to drive down per-unit cost. This relationship is even more pronounced in many high-tech industries because most of the cost occurs before a single product or service is sold. Take operating systems software as an example. Microsoft spends over \$10 billion a year on research and development (R&D). 18 Between 2011 and 2015, a good part of this was spent on developing Windows 10, its most recent operating system software. This R&D expense was a fixed cost Microsoft had to incur before a single copy of Windows 10 was sold. However, once the initial version of the new software was completed, the marginal cost of each additional copy was basically zero, especially for copies sold in digital form online. Given that Microsoft dominates the operating system market for personal computers (PCs) with more than 90 percent market share, it expects to sell several hundred million copies of Windows 10, thereby spreading its huge fixed cost of development over a large output. Microsoft's huge installed base of Windows operating systems throughout the world allowed it to capture a large profit margin for each copy of Windows sold, after recouping its initial investment. Microsoft's Windows 10 also drives sales for complementary products such as the ubiquitous Microsoft Office Suite made up of Word, Excel, PowerPoint, and Outlook, among other programs (as discussed in ChapterCase 5).

EMPLOYING SPECIALIZED SYSTEMS AND EQUIPMENT. Larger output also allows firms to invest in more specialized systems and equipment, such as enterprise resource planning (ERP) software or manufacturing robots. Tesla's strong demand for its Model 3 sedan allows it to employ cutting-edge robotics in its Fremont, California, manufacturing plant to produce cars of high quality at large scale, and thus driving down costs. Tesla is expecting even more demand for the Model 3 and the newly launched Model Y in China, thus it will employ more specialized systems and equipment in the new and much larger Shanghai, China, factory in its quest for economies of scale.

minimum efficient scale (MES) Output range needed to bring down the cost per unit as much as possible, allowing a firm to stake out the lowest-cost position that is achievable through economies of scale.

diseconomies of scale Increases in cost per unit when output increases. TAKING ADVANTAGE OF CERTAIN PHYSICAL PROPERTIES. Economies of scale also occur because of certain physical properties. One such property is known as the *cube-square rule*: The volume of a body such as a pipe or a tank increases disproportionately more than its surface. This same principle makes big-box retail stores such as Walmart or The Home Depot cheaper to build and run. They can also stock much more merchandise and handle inventory more efficiently. Their huge size makes it difficult for department stores or small retailers to compete on cost and selection.

Look again at Exhibit 6.5. The output range between  $Q_1$  and  $Q_2$  in the figure is considered the **minimum efficient scale (MES)** to be cost-competitive. Between  $Q_1$  and  $Q_2$ , the returns to scale are constant. It is the output range needed to bring the cost per unit down as much as possible, allowing a firm to stake out the lowest-cost position achievable through economies of scale. With more than 10 million Prius cars sold worldwide since its introduction in 1997, Toyota has been able to reach the minimum efficient scale part of the per-unit cost curve. This allows the company to offer the car at a relatively low price and still make a profit.

The concept of minimum efficient scale applies not only to manufacturing processes but also to managerial tasks such as how to organize work. Due to investments in specialized technology and equipment (e.g., electric arc furnaces), Nucor is able to reach MES with much smaller batches of steel than larger, fully vertically integrated steel companies using older technology. Nucor's optimal plant size is about 500 people, which is much smaller than at larger integrated steelmakers such as U.S. Steel which often employ thousands of workers per plant. <sup>19</sup> Of course, minimum efficient scale depends on the specific industry: The average per-unit cost curve, depicted conceptually in Exhibit 6.5, is a reflection of the underlying production function, which is determined by technology and other input factors.

Benefits to scale cannot go on indefinitely, though. Bigger is not always better; in fact, sometimes bigger is worse. Beyond Q2 in Exhibit 6.5, firms experience diseconomies of scale—increases in cost as output increases. As firms get too big, the complexity of managing and coordinating the production process raises the cost, negating any benefits to scale. Large firms also tend to become overly bureaucratic, with too many layers of hierarchy. They grow inflexible and slow in decision making. To avoid problems associated with diseconomies of scale, Gore Associates, maker of GORE-TEX fabric, Glide dental floss, and many other innovative products, breaks up its company into smaller units. Gore Associates found that employing about 150 people per plant allows it to avoid diseconomies of scale. It uses a simple decision rule:<sup>20</sup> "We put 150 parking spaces in the lot, and when people start parking on the grass, we know it's time to build a new plant."<sup>21</sup>

Finally, there are also physical limits to scale. Airbus is pushing the envelope with its A-380 aircraft, which can hold more than 850 passengers and can fly 9,520 miles (from Newark, New Jersey, to Singapore, for instance). The goal, of course, is to drive down the cost of the average seat-mile flown (CASM, a standard cost metric in the airline industry). It appears, however, that the A-380 superjumbo did not allow airlines to operate at minimum efficient scale, and thus failed to deliver the lowest cost per unit (CASM) possible. Rather, it turned out that the A-380 was simply too large to be efficient, thus causing *diseconomies of scale*. For example, boarding and embarking procedures needed to be completely revamped and streamlined to accommodate more than 850 people in a timely and safe manner. Airports around the world needed to be retrofitted with longer and wider runways to allow the superjumbo to take off and land. To prove the point, Airbus announced in early 2019 that it will cease production of the A-380 in 2021 as demand declined for the superjumbo in recent years.<sup>22</sup>

Scale economies are critical to driving down a firm's cost and strengthening a costleadership position. Although strategic leaders need to increase output to operate at a minimum efficient scale (between Q1 and Q2 in Exhibit 6.5), they also need to be watchful not to drive scale beyond Q2, where they would encounter diseconomies. In sum, if the firm's output range is less than  $Q_1$  or more than  $Q_2$ , the firm is at a cost disadvantage; reaching an output level between Q1 and Q2 is optimal in regards to driving down costs. Monitoring the firm's cost structure closely over different output ranges allows managers to fine-tune operations and benefit from economies of scale.

## **LEARNING CURVE**

Do learning curves go up or down? Looking at the challenge of learning, many people tend to see it as an uphill battle, and assume the learning curve goes up. But if we consider our productivity, learning curves go down, as it takes less and less time to produce the same output as we learn how to be more efficient—learning by doing drives down cost. As individuals and teams engage repeatedly in an activity, whether writing computer code, developing new medicines, or building submarines, they learn from their cumulative experience. Learning curves were first documented in aircraft manufacturing as the United States ramped up production in the 1930s, before its entry into World War II. Learning time production was doubled, the per-unit cost dropped by a predictable and constant rate (approximately 20 percent).

It is not surprising that a learning curve was first observed in aircraft manufacturing. Highly complex, a modern commercial aircraft can contain more than 5 million parts, compared with a few thousand for a car. The more complex the underlying process to manufacture a product or deliver a service, the more learning effects we can expect. As cumulative output increases, managers learn how to optimize the process, and workers improve their performance through repetition and specialization.

TESLA'S LEARNING CURVE. Tesla's production of its Model S vehicle provides a more recent example, depicted in Exhibit 6.6, with the horizontal axis showing cumulative output in units and the vertical axis showing per-unit cost in thousands of dollars.<sup>26</sup>

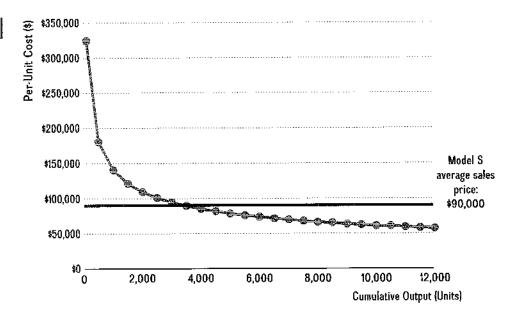
The California-based designer and manufacturer of all-electric cars made headlines in 2017 when its market capitalization overtook both GM and Ford. This was the first time in U.S. history that the most valuable U.S. car company is not based in Detroit, Michigan, but in Silicon Valley. In 2016, Tesla sold some 80,000 vehicles, while GM sold some 10 million. How can a start-up company that makes less than 1 percent as many vehicles as GM have a higher market valuation? The answer: Future expected growth. Investors bidding up Tesla's share price count on the maker of all-electric cars to sell millions of its newer Model 3 (compact sedan) and Model Y (compact SUV). When the Model 3 was announced in 2016, Tesla garnered some 400,000 preorders from future owners for a car that was not yet produced, let alone test-driven by any potential buyer. The Model Y was announced in 2019 and is expected to be ready for delivery in 2021.

Tesla's learning curve is critical in justifying such lofty stock market valuations, because as production volume increases, production cost per car falls, and the company becomes profitable. Based on a careful analysis of production reports for the Model S between 2012 and 2014<sup>27</sup>, Exhibit 6.6 shows how Tesla was able to drive down the unit cost for each car as production volume ramped up. Initially, Tesla lost a significant amount of money on each Model S sold because of high upfront R&D spending to develop the futuristic self-driving car. When producing only 1,000 vehicles, unit cost was \$140,000. As production volume of the Model S reached some 12,000 units per year (in 2014), unit cost fell to about \$57,000. Although still high, Tesla was able to start making money on each car, because the average selling price for a Model S was about \$90,000.

### **EXHIBIT 6.6**

#### Tesla's Learning Curve Producing the Model S

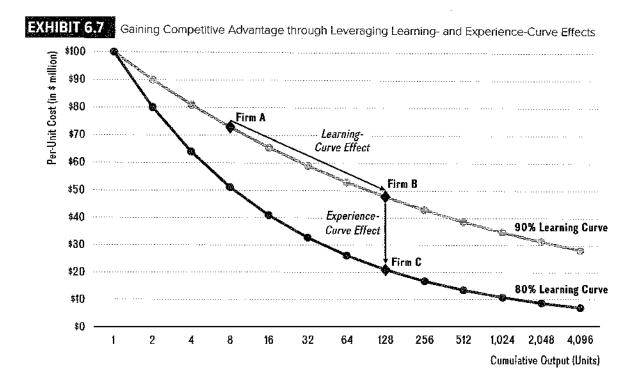
Source: Depiction of functional relationship estimated in J. Dyer and H. Gregersen (2016, Aug. 24). "Tesla's innovations are transforming the auto industry," Forbes.



The relationship between production volume and per-unit cost for Tesla (depicted in Exhibit 6.6) suggests that it is an 80 percent learning curve. In an 80 percent learning curve, per-unit cost drops 20 percent every time output is doubled. Assuming a similar relationship holds for the Model 3 production, then per-unit cost would fall to \$16,000 per Model 3 with a cumulative production volume of 400,000 (which is the number of preorders Tesla received within one week of announcing this new vehicle). Although the Model 3 base price is pegged at \$35,000, the estimated average selling price is more like \$50,000 given additional features and eventual expiration of a \$7,500 federal tax credit for electric vehicles (when a manufacturer hits 200,000 units). Riding down an 80 percent learning curve, Tesla could make a profit of an estimated \$34,000 per Model 3. This would translate to a cumulative profit for Tesla of more than \$13.5 billion for the Model 3 preorders alone. As Tesla is reducing the price for the Model 3, the expected profits would decline accordingly. This back-of-the-envelope calculation shows some of the rationale behind Tesla's market capitalization exceeding that of GM and Ford,

Taken together, this example highlights not only the power of the learning curve in driving down per-unit costs, but also how critical cost containment is in gaining a competitive advantage when pursuing a differentiation strategy as Tesla does.

DIFFERENCES IN LEARNING CURVES. Let's now compare different learning curves, and explore their implications for competitive advantage. The steeper the learning curve, the more learning has occurred. As cumulative output increases, firms move down the learning curve, reaching lower per-unit costs. Exhibit 6.7 depicts two different learning curves: a 90 percent and an 80 percent learning curve. In a 90 percent learning curve, per-unit cost drops 10 percent every time output is doubled. The steeper 80 percent learning curve indicates a 20 percent drop every time output is doubled (this was the case in the Tesla example above). It is important to note that the learning-curve effect is driven by increasing cumulative output within the existing technology over time. That implies that the only difference between two points on the same learning curve is the size of the cumulative output. The underlying technology remains the same. The speed of



learning determines the slope of the learning curve, or how steep the learning curve is (e.g., 80 percent is steeper than a 90 percent learning curve because costs decrease by 20 percent versus a mere 10 percent each time output doubles). In this perspective, economies of learning allow movement down a given learning curve based on current production technology.

By moving further down a given learning curve than competitors, a firm can gain a competitive advantage. Exhibit 6.7 shows that Firm B is further down the 90 percent learning curve than Firm A. Firm B leverages economies of learning due to larger cumulative output to gain an advantage over Firm A. The only variable that has changed is cumulative output; the technology underlying the 90 percent learning curve remained the same.

Let's continue with the example of manufacturing airframes. To be more precise, as shown in Exhibit 6.7, Firm A produces eight aircraft and reaches a per-unit cost of \$73 million per aircraft. Firm B produces 128 aircraft using the same technology as Firm A (because both firms are on the same [90 percent] learning curve), but given a much larger cumulative output, its per unit-cost falls to only \$48 million. Thus, Firm B has a clear competitive advantage over Firm A, assuming similar or identical quality in output. We will discuss Firm C when we formally introduce the impact of changes in technology and process innovation.

Learning curves are a robust phenomenon observed in many industries, not only in manufacturing processes but also in alliance management, franchising, and health care.<sup>29</sup> For example, physicians who perform only a small number of cardiac surgeries per year can have a patient mortality rate five times higher than physicians who perform the same surgery more frequently.<sup>30</sup> Strategy Highlight 6.1 features Dr. Devi Shetty of India who reaped huge benefits by applying learning-curve principles to open-heart surgery, driving down cost while improving quality at the same time.

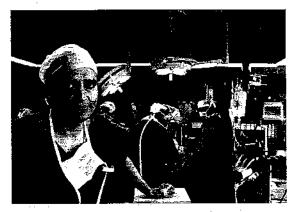
# Strategy Highlight 6.1

# Dr. Shetty: "The Henry Ford of Heart Surgery"

Open-heart surgeries are complex medical procedures and loaded with risk. While well-trained surgeons using high-tech equipment are able to reduce mortality rates, costs for cardiac surgeries in the United States have climbed. Difficult heart surgeries can cost \$100,000 or more. A heart surgeon in India has driven the costs down to an average of \$2,000 per heart surgery, while delivering equal or better outcomes in terms of quality.

Dr. Devi Shetty's goal is to be "the Henry Ford of heart surgery." Just like the American industrialist who applied the learning curve to drive down the cost of an automobile to make it affordable, so Dr. Shetty is reducing the costs of health care and making some of the most complex medical procedures affordable to the world's poorest. A native of Mangalore, India, Dr. Shetty was trained as a heart surgeon at Guy's Hospital in London, one of Europe's best medical facilities. He first came to fame in the 1990s when he successfully conducted an open-heart bypass surgery on Mother Teresa, after she suffered a heart attack.

Dr. Shetty believes that the key to driving down costs in health care is not product innovation, but process innovation. He is able to drive down the cost of complex medical procedures from \$100,000 to \$2,000 not by doing one big thing, but rather by focusing on doing a thousand small things. Dr. Shetty is applying the concept of the learning curve to make a complex procedure routine and comparatively inexpensive. Part of the Narayana Health group, Dr. Shetty's hospital in Bangalore, India, performs so many cardiac procedures per year that doctors are able to get a great deal of experience quickly, which allows them to specialize in one or two complex procedures. The Narayana surgeons perform two or three procedures a day for six days a week, compared to U.S. surgeons who perform one or two procedures a day for five days a week. The difference adds up. Some of Dr. Shetty's surgeons perform more specialized procedures by the time they are in their 30s than their U.S. counterparts will perform throughout their entire careers. This volume of experienc e allows the cardiac surgeons to move down the learning curve quickly, because the more heart surgeries they perform, the more their skills improve. With this skill level, surgical teams develop robust standard operating procedures and processes, where team members become experts at their specific tasks.



Namas Bhojani

This expertise improves outcomes while the learning-curve effects of performing the same procedures over time also drive down cost (see Exhibit 6.7). Other factors provide additional cost savings. At the same time, Dr. Shetty pays his cardiac surgeons the going rate in India, between \$110,000 and \$250,000 a year, depending on experience. Their U.S. counterparts earn two to three times the average indian salary.

Dr. Shetty's health group also reduces costs through economies of scale. By performing thousands of heart surgeries a year, high fixed costs such as the purchase of expensive medical equipment can be spread over a much larger volume. The Narayana hospital in Bangalore has 1,000 beds (many times larger than the average U.S. hospital with 160 beds) and some 20 operating rooms that stay busy pretty much around the clock. This scale allows the Narayana heart clinic to cost-effectively employ specialized high-tech equipment. Given the large size of Dr. Shetty's hospital, it also has significant buying power, driving down the costs of the latest high-tech equipment from vendors such as GE and Stemens. Wherever possible, Dr. Shetty sources lower-cost inputs such as sutures locally, rather than from the more expensive companies such as Johnson & Johnson. Further, the Narayana heart clinic shares common services, such as laboratories and blood bank and more mundane services such as catering. with the 1,400-bed cancer clinic next door. Taken together, all of these small changes result in significant cost savings, and so create a reinforcing system of low-cost value chain activities.

While many worry that high volume compromises quality, the data suggest the opposite: Narayana Health's medical outcomes in terms of mortality rate are equal to or even lower than the best hospitals in the United States. The American College of Cardiology frequently sends surgeons and administrators to visit the Narayana heart clinic. The college concluded that the clinic provides high-tech and high-quality care at low cost. Dr. Shetty now brings top-notch care at low cost to the masses in India.

Narayana Health runs a chain of over 30 hospitals in 20 locations throughout India and performs some 100,000 heart surgeries a year.

Dr. Shetty is also bringing his high-quality, low-cost health care solutions closer to American patients. In 2014, his group opened the doors to Health City Cayman Islands, a fully accredited cardiac and cardiothoracic surgery clinic, a bit over one hour from Miami by air.<sup>31</sup>

Learning effects differ from economies of scale (discussed earlier) as shown:

- Differences in timing. Learning effects occur over time as output accumulates, while economies of scale are captured at one point in time when output increases. The improvements in Tesla's production costs, featured earlier, resulted from some 12,000 units in cumulative output, but it took two years to reach this volume (see Exhibit 6.6). Although learning can decline or flatten (see Exhibit 6.7), there are no diseconomies to learning (unlike diseconomies to scale in Exhibit 6.5).
- Differences in complexity. In some production processes (e.g., the manufacture of steel rods), effects from economies of scale can be quite significant, while learning effects are minimal. In contrast, in some professions (brain surgery or the practice of estate law), learning effects can be substantial, while economies of scale are minimal.

Managers need to understand such differences to calibrate their business-level strategy. If a firm's cost advantage is due to economies of scale, a strategic leader should worry less about employee turnover (and a potential loss in learning) and more about drops in production runs. In contrast, if the firm's low-cost position is based on complex learning, a strategic leader should be much more concerned if a key employee (e.g., a star engineer) was to leave.

#### **EXPERIENCE CURVE**

In the *learning curve* just discussed, we assumed the underlying technology remained constant, while only cumulative output increased. In the *experience curve*, in contrast, we now change the underlying technology while holding cumulative output constant.<sup>32</sup>

In general, technology and production processes do not stay constant. *Process innovation*—a new method or technology to produce an existing product—may initiate a new and steeper curve. Assume that Firm C, on the same learning curve as Firm B, implements a new production process (such as lean manufacturing). In doing so, Firm C initiates an entirely new and steeper learning curve. Exhibit 6.7 shows this *experience-curve effect* based on a process innovation. Firm C jumps down to the 80 percent learning curve, reflecting the new and lower-cost production process. Although Firm B and Firm C produce the same cumulative output (each making 128 aircraft), the per-unit cost differs. Firm B's per-unit cost for each airplane, being positioned on the less-steep 90 percent learning curve, is \$48 million.<sup>33</sup> In contrast, Firm C's per-unit cost, being positioned on the steeper 80 percent learning curve because of process innovation, is only \$21 million per aircraft, and thus less than half that of Firm B. Clearly, Firm C has a competitive advantage over Firm B based on lower cost per unit (assuming similar quality).

Learning by doing allows a firm to lower its per-unit costs by moving down a given learning curve, while experience-curve effects based on process innovation allow a firm to leapfrog to a steeper learning curve, thereby driving down its per-unit costs.

In Strategy Highlight 6.1, we saw how Dr. Shetty leveraged learning-curve effects to save lives while driving down costs. One could argue that his Narayana Health group not only moved down a given learning curve using best industry practice, but it also jumped down to a new and steeper learning curve through process innovation. Dr. Shetty sums up his business strategy based on cost leadership: "Japanese companies reinvented the process of making cars (by introducing lean manufacturing). That's what we're doing in health care. What health care needs is process innovation, not product innovation."<sup>34</sup>

In a cost-leadership strategy, managers must focus on lowering the costs of production while maintaining a level of quality acceptable to the customer. If firms can share the benefits of lower costs with consumers, cost leaders appeal to the bargain-conscious buyer, whose main criterion is price. By looking to reduce costs in each value chain activity, managers aim for the lowest-cost position in the industry. They strive to offer lower prices than competitors and thus to increase sales. Cost leaders such as Walmart ("Every Day Low Prices") can be quite profitable by pursuing this strategic position over time.

### LO 6-4

Assess the benefits and risks of differentiation and cost-leadership strategies vis-à-vis the five forces that shape competition.

# 6.4 Business-Level Strategy and the Five Forces: Benefits and Risks

The business-level strategies introduced in this chapter allow firms to carve out strong strategic positions that enhance the likelihood of gaining and sustaining competitive advantage. The five forces model introduced in Chapter 3 helps strategic leaders assess the forces—threat of entry, power of suppliers, power of buyers, threat of substitutes, and rivalry among existing competitors—that make some industries more attractive than others. With this understanding of industry dynamics, managers use one of the generic business-level strategies to protect themselves against the forces that drive down profitability. Exhibit 6.8 details the relationship between competitive positioning and the five forces. In particular, it highlights the benefits and risks of differentiation and cost-leadership business strategies, which we discuss next.

# DIFFERENTIATION STRATEGY: BENEFITS AND RISKS

A differentiation strategy is defined by establishing a strategic position that creates higher perceived value while controlling costs. The successful differentiator stakes out a unique strategic position, where it can benefit from imperfect competition (as discussed in Chapter 3) and command a premium price. A well-executed differentiation strategy reduces rivalry among competitors.

A successful differentiation strategy is likely to be based on unique or specialized features of the product, on an effective marketing campaign, or on intangible resources such as a reputation for innovation, quality, and customer service. A rival would need to improve the product features as well as build a similar or more effective reputation in order to gain market share. The threat of entry is reduced: Competitors will find such intangible advantages time-consuming and costly, and maybe impossible, to imitate. If the source of the differential appeal is intangible rather than tangible (e.g., reputation rather than observable product and service features), a differentiator is even more likely to sustain its advantage.

Moreover, if the differentiator is able to create a significant difference between perceived value and current market prices, the differentiator will not be so threatened by increases in input prices due to powerful suppliers. Although an increase in input factors could erode margins, a differentiator is likely able to pass on price increases to its customers as long as its value creation exceeds the price charged. Since a successful differentiator creates

# EXHIBIT 6.8

Competitive Positioning and the Five Forces: Benefits and Risks of Differentiation and Cost-Leadership Business Strategies

<ul> <li>Protection against entry due to intangible resources such as a reputation for innovation,</li> </ul>	Erosion of margins     Replacement	Protection against entry due to	Erosion of margins
quality, or customer service		economies of scale	Replacement
<ul> <li>Protection against increase in input prices, which can be passed on to customers</li> </ul>	• Erosion of margins	<ul> <li>Protection against increase in input prices, which can be absorbed</li> </ul>	• Erosion of margins
<ul> <li>Protection against decrease in sales prices, because well- differentiated products or services are not perfect imitations</li> </ul>	• Erosion of margins	Protection against decrease in sales prices, which can be absorbed	- Erosion of margins
<ul> <li>Protection against substitute products due to differential appeal</li> </ul>	Replacement, especially when faced with innovation	Protection against substitute products through further lowering of prices	Replacement, especially when faced with innovation
<ul> <li>Protection against competitors if product or service has enough differential appeal to command premium price</li> </ul>	<ul> <li>Focus of competition shifts to price</li> <li>Increasing differentiation of product features that do not create value but raise costs</li> <li>Increasing differentiation to raise</li> </ul>	Protection     against price     wars because     lowest-cost firm     will win	<ul> <li>Focus of competition shifts to non-price attributes</li> <li>Lowering costs to drive value creation below acceptable threshold</li> </ul>
	Protection against increase in input prices, which can be passed on to customers  Protection against decrease in sales prices, because well-differentiated products or services are not perfect imitations  Protection against substitute products due to differential appeal  Protection against competitors if product or service has enough differential appeal to command	<ul> <li>Protection against increase in input prices, which can be passed on to customers</li> <li>Protection against decrease in sales prices, because well-differentiated products or services are not perfect imitations</li> <li>Protection against substitute products due to differential appeal</li> <li>Protection against competitors if product or service has enough differential appeal to command premium price</li> <li>Protection against command do not create value but raise costs</li> <li>Increasing</li> </ul>	<ul> <li>Protection against increase in input prices, which can be passed on to customers</li> <li>Protection against decrease in sales prices, because well-differentiated products or services are not perfect imitations</li> <li>Protection against substitute products due to differential appeal</li> <li>Protection against senough differential appeal to command premium price</li> <li>Protection against competitors if product or service has enough differential appeal to command premium price</li> <li>Protection against constant innovation increase in input prices, which can be absorbed</li> <li>Protection against when faced with innovation innovation increase in input prices, which can be absorbed</li> <li>Protection against substribute products through further lowering of prices</li> <li>Protection against substitute products through further lowering of prices</li> <li>Increasing differentiation of product features that do not create value but raise costs</li> <li>Increasing differentiation to raise costs above</li> </ul>

Source: Based on M.E. Porter (2008, January), "The five competitive forces that shape strategy," Harvard Business Review; and M.E. Porter (1980), Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: Free Press).

perceived value in the minds of consumers and builds customer loyalty, powerful buyers demanding price decreases are unlikely to emerge. A strong differentiated position also reduces the threat of substitutes, because the unique features of the product have been created to appeal to customer preferences, keeping them loyal to the product. By providing superior quality beverages and other food items combined with a great customer experience and a global presence, Starbucks has built a strong differentiated appeal. It has cultivated a loyal following of customers who reward it with repeat business.

The viability of a differentiation strategy is severely undermined when the focus of competition shifts to price rather than value-creating features. This can happen when differentiated products become commoditized and an acceptable standard of quality has emerged across rival firms. Although the iPhone was a highly differentiated product when introduced in 2007, touch-based screens and other once-innovative features are now standard in smartphones. Indeed, Android-based smartphones hold some 75 percent market share globally, while Apple's iOS phones hold about 23 percent. Several companies including Google; Samsung and LG, both of South Korea; and low-cost leaders Huawei and Xiaomi of China are attempting to challenge Apple's ability to extract significant profits from the smartphone industry based on its iPhone franchise. A differentiator also needs to be careful not to overshoot its differentiated appeal by adding product features that raise costs but not perceived value in the minds of consumers. For example, any additional increase in screen resolution beyond Apple's retina display cannot be detected by the human eye at a normal viewing distance. Finally, a differentiator needs to be vigilant that its costs of providing uniqueness do not rise above the customer's willingness to pay.

#### COST-LEADERSHIP STRATEGY: BENEFITS AND RISKS

A cost-leadership strategy is defined by obtaining the lowest-cost position in the industry while offering acceptable value. The cost leader, therefore, is protected from other competitors because of having the lowest cost. If a price war ensues, the low-cost leader will be the last firm standing; all other firms will be driven out as margins evaporate. Since reaping economies of scale is critical to reaching a low-cost position, the cost leader is likely to have a large market share, which in turn reduces the threat of entry.

A cost leader is also fairly well isolated from threats of powerful suppliers to increase input prices, because it is more able to absorb price increases through accepting lower profit margins. Likewise, a cost leader can absorb price reductions more easily when demanded by powerful buyers. Should substitutes emerge, the low-cost leader can try to fend them off by further lowering its prices to reinstall relative value with the substitute. For example, Walmart tends to be fairly isolated from these threats. Walmart's cost structure combined with its large volume allows it to work with suppliers in keeping prices low, to the extent that suppliers are often the party that experiences a profit-margin squeeze.

Although a cost-leadership strategy provides some protection against the five forces, it also carries some risks. If a new entrant with relevant expertise enters the market, the low-cost leader's margins may erode due to loss in market share while it attempts to learn new capabilities. For example, Walmart faces challenges to its cost leadership. Dollar General stores, and other smaller low-cost retail chains, have drawn customers who prefer a smaller format than the big box of Walmart. The risk of replacement is particularly pertinent if a potent substitute emerges due to an innovation. Leveraging ecommerce, Amazon has become a potent substitute and thus a powerful threat to many brick-and-mortar retail outlets including Barnes & Noble, Best Buy, The Home Depot, and even Walmart. Powerful suppliers and buyers may be able to reduce margins so much that the low-cost leader could have difficulty covering the cost of capital and lose the potential for a competitive advantage.

The low-cost leader also needs to stay vigilant to keep its cost the lowest in the industry. Over time, competitors can beat the cost leader by implementing the same business strategy, but more effectively. Although keeping its cost the lowest in the industry is imperative, the cost leader must not forget that it needs to create an acceptable level of value. If continuously lowering costs leads to a value proposition that falls below an acceptable threshold, the low-cost leader's market share will evaporate. Finally, the low-

cost leader faces significant difficulties when the focus of competition shifts from price to non-price attributes.

We have seen how useful the five forces model can be in industry analysis. None of the business-level strategies depicted in Exhibit 6.2 (cost leadership, differentiation, and focused variations thereof) is inherently superior. The success of each depends on context and relies on two factors:

- How well the strategy leverages the firm's internal strengths while mitigating its weaknesses.
- How well it helps the firm exploit external opportunities while avoiding external threats.

There is no single correct business strategy for a specific industry. The deciding factor is that the chosen business strategy provides a strong position that attempts to maximize economic value creation and is effectively implemented.

# 6.5 Blue Ocean Strategy: Combining Differentiation and Cost Leadership

So far we've seen that firms can create more economic value and the likelihood of gaining and sustaining competitive advantage in one of two ways—either increasing perceived consumer value (while containing costs) or lowering costs (while offering acceptable value). Should strategic leaders try to do both at the same time? In general the answer is no. To accomplish this, they would need to integrate two different strategic positions: differentiation and low cost.<sup>37</sup> Managers should not pursue this complex strategy because of the inherent trade-offs in different strategic positions, unless they are able to reconcile the conflicting requirements of each generic strategy.

blue ocean strategy Businesslevel strategy that successfully combines differentiation and cost-leadership activities using value innovation to reconcile the inherent trade-offs.

To meet this challenge, strategy scholars Kim and Mauborgne advanced the notion of a blue ocean strategy, which is a business-level strategy that successfully combines differentiation and cost-leadership activities using value innovation to reconcile the inherent trade-offs in those two distinct strategic positions.38 They use the metaphor of an ocean to denote market spaces. Blue oceans represent untapped market space, the creation of additional demand, and the resulting opportunities for highly profitable growth. In contrast, red oceans are the known market space of existing industries. In red oceans the rivalry among existing firms is cut-throat because the market space is crowded and competition is a zero-sum game. Products become commodities, and competition is focused mainly on price. Any market share gain comes at the expense of other competitors in the same industry, turning the oceans bloody red.

A blue ocean strategy allows a firm to offer a differentiated product or service at low cost. As one example of a blue ocean strategy, consider the grocery chain Trader Joe's. Trader Joe's had much lower costs than Whole Foods (prior to its 2017 acquisition by Amazon) for the same market of patrons desiring high value and health-conscious foods, and Trader Joe's scores exceptionally well in customer service and other areas. When a blue ocean strategy is successfully formulated and implemented, investments in differentiation and low cost are not substitutes but are



Strategic leaders may use value innovation to move to blue oceans, that is, to new and uncontested market spaces. Shown here is the famous "blue hole" just off Belize.
Mienny/Getty images

complements, providing important positive spill-over effects. A successfully implemented blue ocean strategy allows firms two pricing options: First, the firm can charge a higher price than the cost leader, reflecting its higher value creation and thus generating greater profit margins. Second, the firm can lower its price below that of the differentiator because of its lower-cost structure. If the firm offers lower prices than the differentiator, it can gain market share and make up the loss in margin through increased sales.

# LO 6-5

Evaluate value and cost drivers that may allow a firm to pursue a blue ocean strategy.

value innovation The simultaneous pursuit of differentiation and low cost in a way that creates a leap in value for both the firm and the consumers; considered a cornerstone of blue ocean strategy.

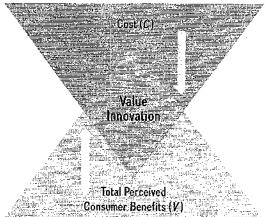
#### **VALUE INNOVATION**

For a blue ocean strategy to succeed, managers must resolve trade-offs between the two generic strategic positions—low cost and differentiation.<sup>39</sup> This is done through value innovation, aligning innovation with total perceived consumer benefits, price, and cost (also see the discussion in Chapter 5 on economic value creation). Instead of attempting to out-compete rivals by offering better features or lower costs, successful value innovation makes competition irrelevant by providing a leap in value creation, thereby opening new and uncontested market spaces.

Successful value innovation requires that a firm's strategic moves lower its costs and also increase the perceived value for buyers (see Exhibit 6.9). Lowering a firm's costs is primarily achieved by eliminating and reducing the taken-for-granted factors that the firm's industry rivals compete on. Perceived buyer value is increased by raising existing key success factors and by creating new elements that the industry has not offered previously. To initiate a strategic move that allows a firm to open a new and uncontested market space through value innovation, strategic leaders must answer the four key questions below when formulating a blue ocean business strategy. In terms of achieving successful value innovation, note that the first two questions focus on lowering costs, while the second two questions focus on increasing perceived consumer benefits.

# EXHIBIT 6.9

Value Innovation Accomplished through Simultaneously Pursuing Differentiation ( $V\uparrow$ ) and Low Cost ( $C\downarrow$ )



Source: Adapted from C.W. Kim and R. Mauborgne (2005), *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant* (Boston: Harvard Business School Publishing),

#### Value Innovation-Lower Costs

- 1. *Eliminate*. Which of the factors that the industry takes for granted should be eliminated?
- 2. Reduce. Which of the factors should be reduced well below the industry's standard?

#### Value Innovation—Increase Perceived Consumer Benefits

- Raise. Which of the factors should be raised well above the industry's standard?
- 2. Create. Which factors should be created that the industry has never offered?

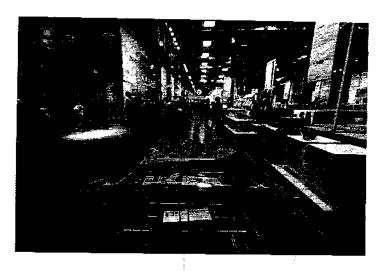
The international furniture retailer IKEA, for example, has used value innovation based on the *eliminate-reduce-raise-create* framework to initiate its own blue ocean and to achieve a sustainable competitive advantage.<sup>41</sup>

ELIMINATE (TO LOWER COSTS). IKEA eliminated several taken-for-granted competitive elements: salespeople, expensive but small retail outlets in prime urban locations and

shopping malls, long wait after ordering furniture, after-sales service, and other factors. In contrast, IKEA displays its products in a warehouse-like setting, thus reducing inventory cost. Customers serve themselves and then transport the furniture to their homes in IKEA's signature flat-packs for assembly. IKEA also uses the big-box concept of locating supersized stores near major metropolitan areas (please refer to the discussion of "Taking Advantage of Certain Physical Properties" under "Economies of Scale" in Section 6.3).

REDUCE (TO LOWER COSTS). Because of its do-it-yourself business model regarding furniture selection, delivery, and assembly, IKEA drastically reduced the need for staff in its mega-stores. Strolling through an IKEA store, you

encounter few employees. IKEA also reduced several other taken-for-granted competitive elements: 25-year warranties on high-end custom furniture, high degree of customization in selection of options such as different fabrics and patterns, and use of expensive materials such as leather or hardwoods, among other elements.



Each IKEA store has a large self-service warehouse section, further driving down its cost. Tooykrub/Shutterstock

RAISE (TO INCREASE PERCEIVED CONSUMER BENEFITS). IKEA raised several competitive elements: It offers tens of thousands of home furnishing items in each of its big-box stores (some 300,000 square feet, roughly five football fields), versus a few hundred at best in traditional furniture stores; it also offers more than furniture, including a range of accessories such as place mats, laptop stands, and much more; each store has hundreds of rooms fully decorated with all sorts of IKEA items, each with a detailed tag explaining the item. Moreover, rather than sourcing its furniture from wholesalers or other furniture makers, IKEA manufactures all of its furniture at fully dedicated suppliers, thus tightly controlling the design, quality, functionality, and cost of each product.

IKEA also raised the customer experience by laying out its stores in such a way that customers see and can touch basically all of IKEA's products, including dishware, bedding, and furniture.

CREATE (TO INCREASE CONSUMER BENEFITS). IKEA created a new way for people to shop for furniture. Customers stroil along a predetermined path winding through the fully furnished showrooms. They can compare, test, and touch all the things in the showroom. The price tag on each item contains other important information: type of material, weight, and so on. Once an item is selected, the customer notes the item number (the store provides a pencil and paper). The tag also indicates the location in the warehouse where the customer can pick up the item in IKEA's signature flat-packs. After paying, the customer transports the products and assembles the furniture. The customer has 90 days to return items for a full refund.

In traditional furniture shopping, customers visit a small retail outlet where salespeople swarm them. After a purchase, the customer has to wait generally a few weeks before the furniture is shipped because many furniture makers do not produce items, such as expensive leather sofas, until they are paid for in advance. Finely crafted couches and chairs cost thousands of dollars (while IKEA's fabric couches retail for \$399). When shopping at a traditional furniture store, the customer also pays for delivery of the furniture.

IKEA also created a new approach to pricing its products. Rather than using a "cost plus margin approach" like traditional furniture stores when pricing items, IKEA begins with the retail price first. For example, it sets the price for an office chair at \$150, and IKEA's designers figure out how to meet this goal, which includes a profit margin. They need to consider the chair from start to finish, including not only design but also raw materials and the way the product will be displayed and transported. Only then will products go into production.

IKEA also created several other new competitive elements that allow it to offer more value to its customers: Stores provide on-site child care, house a cafeteria serving delicious food options including Swedish delicatessen such as smoked salmon at low prices, and offer convenient and ample parking, often in garages under the store, where escalators bring customers directly into the showrooms.

By implementing these key steps to achieving value innovation—eliminate, reduce, raise, and create—IKEA orchestrates different internal value chain activities to reconcile the tension between differentiation and cost leadership to create a unique market space. IKEA uses innovation in multiple dimensions—in furniture design, engineering, and store design—to solve the trade-offs between value creation and production cost. An IKEA executive highlights the difficulty of achieving value innovation as follows: "Designing beautiful-but-expensive products is easy. Designing beautiful products that are inexpensive and functional is a huge challenge." IKEA leverages its deep design and engineering expertise to offer furniture that is stylish and functional and that can be easily assembled by the consumer. In this way, IKEA can pursue a blue ocean strategy based on value innovation to increase the perceived value of its products, while simultaneously lowering its cost and offering competitive prices. It opened a new market serving a younger demographic than traditional furniture stores. When young people the world over move into their own apartment or house, they frequently furnish it from IKEA.

### LO 6-6

Assess the risks of a blue ocean strategy, and explain why it is difficult to succeed at value innovation.

# BLUE OCEAN STRATEGY GONE BAD: "STUCK IN THE MIDDLE"

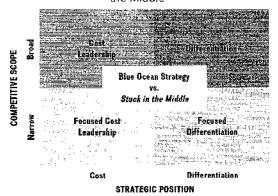
Although appealing in a theoretical sense, a blue ocean strategy can be quite difficult to translate into reality. Differentiation and cost leadership are distinct strategic positions

that require important trade-offs. <sup>43</sup> A blue ocean strategy is difficult to implement because it requires the reconciliation of fundamentally different strategic positions—differentiation and low cost—which in turn require distinct internal value chain activities (see Chapter 4) so the firm can increase value and lower cost at the same time.

Exhibit 6.10 suggests how a successfully formulated blue ocean strategy based on *value innovation* combines both a differentiation and low-cost position. It also shows the consequence of a blue ocean strategy gone bad—the firm ends up being *stuck in the middle*, meaning the firm has neither a clear differentiation nor a clear cost-leadership profile. Being *stuck in the middle* leads to inferior performance and a resulting competitive disadvantage. Strategy Highlight 6.2 shows how Cirque du Soleil is searching for a new blue ocean to avoid being stuck in the middle.

# EXHIBIT 6.10

Value Innovation vs. Stuck in the Middle



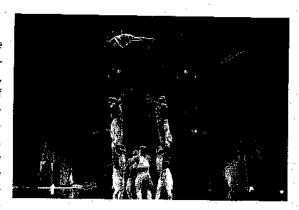
# Strategy Highlight 6.2

# Cirque du Soleil: Finding a New Blue Ocean?

Most of the 11 million people that bought tickets for a Cirque du Soleil show in 2018 were dazzled by its high-quality artistic performances. Founded in 1984 by two street performers, Guy Laliberté and Gilles Ste-Croix, in an inner-city area of Montreal, Canada, Cirque du Soleil today is the largest theatrical producer in the world. With its spectacularly sophisticated shows, Cirque's mission is to "evoke the imagination, invoke the senses, and provoke the emotions of people around the world." Employing more than 5,000 people (with one-third of them performers) and with annual revenues of over \$1 billion, Cirque is not only the largest live entertainment businesses in the world but also quite successful. How did Cirque become so successful while most circuses have either shut down or barely survived?

CIRQUE'S BLUE OCEAN STRATEGY AND VALUE INNOVATION Using a blue ocean strategy based on value innovation, Cirque du Soleil created a new and thus uncontested market space in the live entertainment industry. Let's take a closer look at how Cirque used the eliminate-reduce-raise-create framework to reinvent the circus and to create a blue ocean of uncontested market space where competition is less of a concern.

Eliminate. In redefining the circus, Cirque du Soleil eliminated several traditional circus elements. First, it did away with all animal shows, partly because of the public's growing concern in recent years about the humane treatment of animals, but also because their care, transportation, medical attention, insurance, and food consumption (a grown male lion can devour 90 pounds of meat a day) were the most expensive items to maintain. Second, Cirque did away with star performers, who were also expensive; name recognition of star performers in the circus industry is trivial compared to that of sports celebrities (e.g., LeBron James) or movie stars (e.g., Scarlett Johansson). Third, it abolished the standard threering stages. These were expensive to upkeep, but they also frequently created anxiety among audience members. Since different acts were being performed on all three stages at the same time, viewers felt forced to switch their attention rapidly from stage to stage. Finally, it did away with aisle concession sales. These annoyed most visitors not only because they frequently interrupted and interfered with the viewing experience, but also because audience members felt like they were being taken advantage of by the vendors' prices.



Cirque du Soleii, the largest live entertainment company globally, dazzles spectators with its high-quality artistic shows. Using a blue ocean strategy allowed Cirque to gain a competitive advantage by creating a new, uncontested market space. The question Cirque's strategic leaders now face is how to sustain its competitive advantage.

Xinhua/Alamy Stock Photo

**Reduce.** Cirque kept the clowns, but reduced their importance in the shows. It also reduced the amount of slapstick and low-brow clown humor, shifting instead to a more sophisticated and intellectually stimulating style.

Raise. Cirque significantly raised the quality of the live performance with its signature acrobatic and aerial acts featuring stunts never before seen. It also elevated the circus tent experience. While many other circuses replaced the extravagant circus tents of old with generic. low-cost and rented venues, Cirque, in contrast, revised the tent, turning it into a unique and magical venue. Its magnificent exteriors attracted the attention of the public, and its interiors provided luxurious seating and highquality amenities. Given that Cirque's consumers were used to paying much higher ticket prices for live theater or ballet performances. Cirque decided to raise its ticket prices as well, starting at \$75 up to \$200. The fact that Cirque's audiences were primarily adults rather than children, made this possible because there were fewer adults attending shows with groups of children in tow.

**Create.** Cirque du Soleil created an entirely new entertainment experience: It combined in novel ways the fun and thrill of the traditional circus with the classical and cultivated storytelling of the ballet and musical theater—a sharp contrast to traditional circus productions that

typically comprise a series of unrelated acts. All dance and musical performances are thoughtfully choreographed and skillfully orchestrated. Akin to Broadway shows, Cirque also offered multiple productions at all major venues across the world. With its productions generally in high demand and being performed in multiple venues around the globe, an increasing number of people were starting to attend the "circus" more frequently, even at high ticket prices.

A PERFECT STORM Although the Cirque du Soleil experience remains high end and high brow, the company has fallen on hard times in recent years. A combination of external and internal factors led to a significant decline in performance. Cirque du Soleil was hit hard by the economic downturn resulting from the 2008–2010 global financial crisis. Its management worsened the situation through a series of poor strategic decisions, including offering foo many shows that were too little differentiated (at least in the mind of the consumer). Consequently, Cirque lost its rarity appeal, its payroll and costs ballooned, and demand for its European shows declined by as much as 40 percent.

Misfortune continued to strike: Cirque du Soleil experienced its first fatality (in 2013) during its signature show Ka in Las Vegas, where one of its performers (a mother of two) fell 95 feet to her death. The U.S. Occupational Safety and Health Administration (OSHA) issued citations and fines, and conducted an in-depth investiga-

tion of safety practices that revealed a high injury rate. One investigation found that Kà alone resulted in 56 injuries per 100 workers, which is four times the injury rate for professional sports teams, according to the Bureau of Labor Statistics. Two more fatalities occurred during live shows in 2016 and 2018. Some Cirque performers claimed that the pressure to perform at high levels made it difficult to raise concerns about acrobat safety.

In 2015, Cirque du Soleil founder Guy Laliberté sold his controlling ownership stake to an investor group led by U.S. private-equity firm TPG. Other investors included Fosun, a Chinese investment firm, and a Canadian pension fund. This deal valued Cirque at \$1.5 billion, down from a onetime \$3 billion valuation. Once flying high, Cirque du Soleil's valuation had dropped by 50 percent.

In the search for a new blue ocean, Cirque is now pursuing a strategy of diversification. In 2017, it bought Blue Man Productions, the New York performance art company. In 2018, Cirque followed up its earlier acquisition by buying Vstar, a children's live entertainment touring group. Mitch Garber, chairman of Cirque du Soleil, who views the company's core competency as "live entertainment touring and logistics," 45 argues that the two most recent acquisitions will allow Cirque to renew its core business, reach new audiences, and expand its repertoire of creative capabilities. To increase its appeal to high-growth markets outside North America, it is infusing Russian and Chinese influences as well as improv comedy. 46

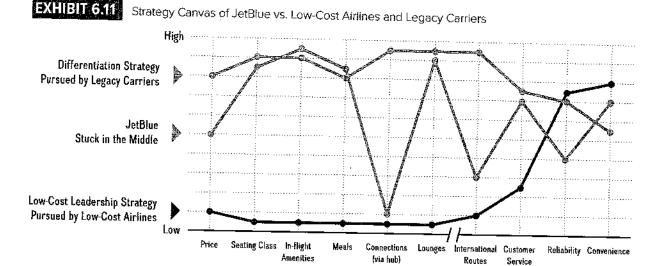
value curve Horizontal connection of the points of each value on the strategy canvas that helps strategic leaders diagnose and determine courses of action.

strategy canvas
Graphical depiction of
a company's relative
performance vis-à-vis
its competitors across
the industry's key success factors.

THE STRATEGY CANVAS. The value curve is the basic component of the strategy canvas. It graphically depicts a company's relative performance across its industry's factors of competition. A strong value curve has focus and divergence, and it can even provide a kind of tagline as to what strategy is being undertaken or should be undertaken.

Exhibit 6.11 plots the strategic profiles or value curves for three kinds of competitors in the U.S. airline industry. On the left-hand side, descending in underlying cost structure, are the legacy carriers (for example, Delta), JetBlue, and finally low-cost airlines such as Southwest Airlines (SWA). We also show the different strategic positions (differentiator, stuck in the middle, and low-cost leader) and trace the value curves as they rank high or low on a variety of parameters. JetBlue is stuck in the middle (as discussed in the ChapterCase). Low-cost airlines follow a cost-leadership strategy. The value curve, therefore, is simply a graphic representation of a firm's relative performance across different competitive factors in an industry.

Legacy carriers tend to score fairly high among most competitive elements in the airline industry, including different seating class choices (such as business class, economy comfort, basic economy, and so on); in-flight amenities such as Wi-Fi, personal video console to view movies or play games, complimentary drinks and meals; coast-to-coast coverage via



connecting hubs; plush airport lounges; international routes and global coverage; high customer service; and high reliability in terms of safety and on-time departures and arrivals. As is expected when pursuing a generic differentiation strategy, all these scores along the different competitive elements in an industry go along with a relative higher cost structure.

In contrast, the low-cost airlines tend to hover near the bottom of the strategy canvas, indicating low scores along a number of competitive factors in the industry, with no assigned seating, no in-flight amenities, no drinks or meals, no airport lounges, few if any international routes, low to intermediate level of customer service. A relatively lower cost structure goes along with a generic low-cost leadership strategy.

This strategy canvas also reveals key strategic insights. Look at the few competitive elements where the value curves of the differentiator and low-cost leader diverge. Interestingly, some cost leaders (e.g., SWA) score much higher than some differentiators (e.g., United Airlines) in terms of reliability and convenience, offering frequent point-to-point connections to conveniently located airports, often in or near city centers. This key divergence between the two strategies explains why generic cost leaders have frequently outperformed generic differentiators in the U.S. airline industry. Overall, both value curves show a consistent pattern representative of a more or less clear strategic profile as either differentiation or low-cost leader,

Now look at JetBlue's value curve. Rather than being consistent such as the differentiation or low-cost value curves, the JetBlue value curve follows a zigzag pattern. JetBlue attempts to achieve parity or even out-compete differentiators in the U.S. airline industry along the competitive factors such as different seating classes (e.g., the high-end Mint offering discussed in the ChapterCase), higher level of in-flight amenities, higher-quality beverages and meals, plush airport lounges, and a large number of international routes (mainly with global partner airlines). JetBlue, however, looks more like a low-cost leader in terms of the ability to provide only a few connections via hubs domestically, and it recently has had a poor record of customer service, mainly because of some high-profile missteps as documented in the ChapterCase. JetBlue's reliability is somewhat mediocre, but it does provide a larger number of convenient point-to-point flights than a differentiator such as Delta, but fewer than a low-cost leader such as SWA.

A value curve that zigzags across the strategy canvas indicates a lack of effectiveness in its strategic profile. The curve visually represents how JetBlue is stuck in the middle and as a consequence experienced inferior performance and thus a sustained competitive disadvantage vis-à-vis airlines with a stronger strategy profile such as SWA and Delta, among others.

# 6.6 Implications for Strategic Leaders

Formulating a business strategy is never easy, even when, as in achieving competitive advantage, only a handful of strategic options are available (i.e., low cost or differentiation, broad or narrow, or blue ocean). The best strategic leaders work hard to make sure they understand their firm and industry effects, and the opportunities they reveal. They work even harder to fine-tune strategy formulation and execution. When well-formulated and implemented, a business strategy enhances a firm's chances of obtaining superior performance. Strategic positioning requires making important trade-offs (think Walmart versus J. Crew in clothing).

In rare instances, a few exceptional firms might be able to change the competitive land-scape by opening previously unknown areas of competition. To do so requires the firm reconcile the significant trade-offs between increasing value and lowering costs by pursuing both business strategies (differentiation and low cost) simultaneously. Such a blue ocean strategy tends to be successful only if a firm is able to rely on a value innovation that allows it to reconcile the trade-offs mentioned. Toyota, for example, initiated a new market space with its introduction of lean manufacturing, delivering cars of higher quality and value at lower cost. This value innovation allowed Toyota a competitive advantage for a decade or more, until this new process technology diffused widely. In a similar fashion, Cirque du Soleil also struggles to sustain competitive advantage based on an initially highly successful blue ocean strategy (see Strategy Highlight 6.2).

# CHAPTERCASE 6 Part II

IN 2019, THE "BIG FOUR" airlines (American, Delta, SWA, and United) controlled about 70 percent of the U.S. domestic market, so the industry is fairly concentrated. JetBlue had 5.6 percent market share and close to \$8 billion in annual revenues.

Early in its history JetBlue Airways achieved a competitive advantage based on value innovation. In particular, JetBlue was able to drive up perceived customer value while lowering costs. This allowed it to carve out a strong strategic position and move to a non-contested market space. This implies that no other competitors in the U.S. domestic airline industry were able to provide such value innovation at that point in time. Rather than directly competing with other airlines, JetBlue created a blue ocean.

Although JetBlue was able to create an initial competitive advantage, the airline was unable to sustain it. Because JetBlue failed to reconcile the strategic trade-offs inherent in combining differentiation and cost leadership, it was unable

to continue its blue ocean strategy, despite initial success. Between 2007 and 2019, JetBlue experienced a sus-



Carlosyudica/123RF

tained competitive disadvantage, lagging the Dow Jones U.S. Airlines Index by more than 35 percentage points over the entire time period.

JetBlue's leadership team is attempting to reverse this trend; it made changes to improve the airline's flagging profitability. It is putting strategic initiatives in place to lower costs, while also trying to further increase its value offering. To lower operating costs, JetBlue decided to start charging \$25 for the first checked bag and \$35 for the second. It also removed the additional legroom JetBlue was famous for in the industry.

To drive up perceived customer value, JetBlue has added to its fleet more than 60 new airplanes (Airbus A-321), which

significantly improve in-flight experience and thus customer satisfaction. Although JetBlue already flies internationally by serving destinations in Central and South America as well as the Caribbean, CEO Robin Hayes is considering adding selected flights to Europe. Flying non-stop to cities in Europe such as London is now possible with the new Airbus A-321. Flying longer, non-stop routes drives down costs. International routes, moreover, tend to be much more profitable than domestic routes because of less competition, for the time being.

#### Questions

- Despite its initial success, why was JetBlue unable to sustain a blue ocean strategy?
- 2. JetBlue's chief commercial officer, Marty St. George, was asked by The Wall Street Journal, "What is the biggest marketing challenge JetBlue faces?" His response: "We are flying in a space where our competitors are moving toward commoditization. We have taken a position that air travel is not a commodity but a services business. We want to stand out, but it's hard to break through to customers with that message."47

- a. Given St. George's statement, which strategic position is JetBlue trying to accomplish; differentiator, cost leader, or blue ocean strategy? Explain why.
- b. Which strategic moves has the team around CEO Hayes put in place, and why? Explain whether they focus on value creation, operating costs, or both simultaneously. Do these moves correspond to St. George's understanding of JetBlue's strategic position? Why or why not? Explain.
- 3. Consider JetBlue's value curve in Exhibit 6.1!. Why is JetBlue experiencing a competitive disadvantage? What recommendations would you offer to JetBlue to strengthen its strategic profile? Be specific.
- 4. JetBlue CEO Robin Hayes is contemplating adding international routes, connecting the U.S. East Coast to Europe. Would this additional international expansion put more pressure on JetBlue's current business strategy? Or would this international expansion require a shift in JetBlue's strategic profile? Why or why not? And if a strategic repositioning is needed, in which direction should JetBlue pivot? Explain.

# mySTRATEGY

# Low-Cost and Differentiated Workplaces

e have studied the differences in business-level strategies closely in this chapter, but how might these differences relate directly to you? As you've learned, firms using a differentiation strategy will focus on drivers such as product features and customer service, while firms using a cost-leadership strategy will prioritize cost of inputs and economies of scale. These strategic decisions can have an impact on an employee's experience with the firm's work environment and culture.

Hilton, Publix, and Wegmans Food Markets are companies that routinely end up on Fortune's list of "100 Best Places to Work." These companies use a differentiation business strategy. In contrast, Amazon and Walmart use the cost-

leadership strategy; and as low-cost leaders, they do not rate nearly as well. According to inputs from the employee review site Glassdoor.com, only 56 percent of the employees working at Walmart would recommend the firm to a friend. Compare this to the over 80 percent who would recommend both Hilton and Wegmans Food Markets.

As you seek options for starting or growing your career, carefully consider the strategy the firm takes in the market-place. By no means should you avoid low-cost leaders in lieu of strong differentiators (nor should you deem all differentiators as great places to work). Fast-paced organizations that focus on driving tangible results for the organization offer much to learn. For example, Amazon has been a very successful company for the past decade, and many employees have had multiple opportunities to learn enormous amounts in a short period. Amazon employees are encouraged to criticize each other's ideas openly in meetings; they work

long days and on weekends; and they strive to meet "unreasonably high" standards: "When you're shooting for the moon, the nature of the work is really challenging. For some people it doesn't work," says Susan Harker, a top recruiter for Amazon. The high standards and relentless pace are a draw for many employees who are motivated to push themselves to learn, grow, and create—perhaps beyond their perceived limits. Many former employees say the nimble and productive environment is great for learning and the Amazon experience has really helped their careers expand. Now consider the following questions.

- 1. Employees and consultants say the Amazon workplace is the epitome of a "do more for less cost" environment. We recognize this is a hallmark goal of a cost-leadership business strategy. But ask yourself this key question, is it the type of high-pressure work environment in which YOU would thrive?
- 2. Amazon has surpassed 650,000 employees and is the second publicly traded company in the world to hit \$1 trillion market capitalization (just after Apple). The company offers bold new ideas as a retailer and is under an intense pressure to deliver on its goals. The allure from this type of success is compelling and offers tremendous rewards to many employees, shareholders, and customers. What aspects of success are you seeking in your professional career?
- Before you launch into a new project, job, or firm, or even before you make a change in industry in the effort to move forward in your career, always consider the tradeoffs that you would and would not be willing to make.48

# TAKE-AWAY CONCEPTS

This chapter discussed two generic business-level strategies: differentiation and cost leadership. Companies can use various tactics to drive one or the other of those strategies, either narrowly or broadly. A blue ocean strategy attempts to find a competitive advantage by creating a new competitive area, which it does (when successful) by value innovation, reconciling the trade-offs between the two generic business strategies discussed. These concepts are summarized by the following learning objectives and related take-away concepts.

## LO 6-1 / Define business-level strategy and describe how it determines a firm's strategic position.

- Business-level strategy determines a firm's strategic position in its quest for competitive advantage when competing in a single industry or product market.
- Strategic positioning requires that managers address strategic trade-offs that arise between value and cost, because higher value tends to go along with higher cost.

- Differentiation and cost leadership are distinct strategic positions.
- Besides selecting an appropriate strategic position, managers must also define the scope of competitionwhether to pursue a specific market niche or go after the broader market.

### LO 6-2 / Examine the relationship between value drivers and differentiation strategy.

- The goal of a differentiation strategy is to increase the perceived value of goods and services so that customers will pay a higher price for additional features.
- In a differentiation strategy, the focus of competition is on value-enhancing attributes and features, while controlling costs.
- Some of the unique value drivers managers can manipulate are product features, customer service, customization, and complements.
- Value drivers contribute to competitive advantage only if their increase in value creation  $(\Delta V)$  exceeds the increase in costs, that is:  $(\Delta V) > (\Delta C)$ .

# LO 6-3 / Examine the relationship between cost drivers and cost-leadership strategy.

- The goal of a cost-leadership strategy is to reduce the firm's cost below that of its competitors.
- In a cost-leadership strategy, the focus of competition is achieving the lowest possible cost position, which allows the firm to offer a lower price than competitors while maintaining acceptable value.
- Some of the unique cost drivers that managers can manipulate are the cost of input factors, economies of scale, and learning- and experience-curve effects.
- No matter how low the price, if there is no acceptable value proposition, the product or service will not sell.

# LO 6-4 / Assess the benefits and risks of differentiation and cost-leadership strategies vis-àvis the five forces that shape competition.

- The five forces model helps managers use generic business strategies to protect themselves against the industry forces that drive down profitability.
- Differentiation and cost-leadership strategies allow firms to carve out strong strategic positions, not only to protect themselves against the five forces, but also to benefit from them in their quest for competitive advantage.
- Exhibit 6.8 details the benefits and risks of each business strategy.

# LO 6-5 / Evaluate value and cost drivers that may allow a firm to pursue a blue ocean strategy.

To address the trade-offs between differentiation and cost leadership at the business level, managers

- must employ value innovation, a process that will lead them to align the proposed business strategy with total perceived consumer benefits, price, and cost.
- Lowering a firm's costs is primarily achieved by eliminating and reducing the taken-for-granted factors on which the firm's industry rivals compete.
- Increasing perceived buyer value is primarily achieved by raising existing key success factors and by creating new elements that the industry has not yet offered.
- Strategic leaders track their opportunities and risks for lowering a firm's costs and increasing perceived value vis-à-vis their competitors by use of a strategy canvas, which plots industry factors among competitors (see Exhibit 6.11).

### LO 6-6 / Assess the risks of a blue ocean strategy, and explain why it is difficult to succeed at value innovation.

- A successful blue ocean strategy requires that trade-offs between differentiation and low cost be reconciled.
- A blue ocean strategy often is difficult because the two distinct strategic positions require internal value chain activities that are fundamentally different from one another.
- When firms fail to resolve strategic trade-offs between differentiation and cost, they end up being "stuck in the middle." They then succeed at neither business strategy, leading to a competitive disadvantage.

# Key terms

Blue ocean strategy (p. 215) Business-level strategy (p. 195) Cost-leadership strategy (p. 197) Differentiation strategy (p. 196) Diseconomies of scale (p. 206) Economies of scale (p. 204)

Economies of scope (p. 200) Focused cost-leadership strategy (p. 198) Focused differentiation strategy (p. 198) Minimum efficient scale (MES) (p. 206)

Scope of competition (p. 197) Strategic trade-offs (p. 196) Strategy canvas (p. 220) Value curve (p. 220) Value innovation (p. 216)

# **DISCUSSION QUESTIONS**

- 1. What are some drawbacks and risks to a broad generic business strategy? To a focused strategy?
- 2. In Chapter 4, we discussed the internal value chain activities a firm can perform (see Exhibit 4.8). The value chain priorities can be quite different for firms taking different business strategies. Create examples of value chains for three firms: one using cost leadership, another using differentiation, and a third using blue ocean strategy.
- 3. The chapter notes there are key differences between economies of scale and learning effects. Let us put that into practice with a brief example.

A company such as Intel has a complex design and manufacturing process. For instance, one

fabrication line for semiconductors typically costs more than \$1.5 billion to build. Yet the industry also has high human costs for research and development (R&D) departments. Semiconductor firms spend an average of 17 percent of revenues on R&D. For comparison the automobile industry spends under 4 percent of sales on R&D.49 Thus Intel's management must be concerned with both scale of production and learning curves. When do you think managers should be more concerned with large-scale production runs, and when do you think they should be most concerned with practices that would foster or hinder the hiring, training, and retention of key employees?

## **ENDNOTES**

1. This ChapterCase is based on: McCartney, S. (2019, Jan. 16), "The best and worst U.S. airlines of 2018," The Wall Street Journal; McCartney, S. (2018, Jan. 10), "The best and worst U.S. airlines of 2017," The Wall Street Journal, McCartney, S. (2017, Mar. 8), "Discount business class? Thank JetBlue," The Wall Street Journal; Carey, S. (2016, Dec. 16), "JetBlue unveils cost-cutting plan worth up to \$300 million by 2020," The Wall Street Journal; Carey, S. (2016, Jul. 26), "JetBlue considers foray into Europe," The Wall Street Journal; Carey, S. (2016, Apr. 12), "JetBlue to expand its high-end scrvice, dubbed Mint, to more routes," The Wall Street Journal; Nicas, J. (2015, Mar. 27), "Pilot sues JetBlue for ailegedly letting him fly while mentally unfit." The Wall Street Journal; Mayerowitz, S. (2015, Feb. 16), "JetBluc's CEO vies to please passengers, stocks," The Associated Press; Vranica, S. (2015, Feb. 22), "JetBlue's plan to repair its brand," The Wall Street Journal; Harris, R.L. (2015, Feb. 11), "On JetBlue, passengers can use ApplePay," The New York Times; Rosenbloom, S. (2015, Jan. 22), "Flying deluxe domestic coast-to-coast for around \$1,000," The New York Times; Nicas, J. (2014, Nov. 19), "JetBlue to add bag fees, reduce legroom," The Wall Street Journal; Gardiner, S. (2010, Aug. 10), "Flight attendant grabs two beers, slides down the emergency chute," The Wall Street Journal; Miranda, C.A. (2007, Feb. 21), "Can JetBlue weather the storm?" Time; Bailey, J. (2007, Feb. 19), "JetBlue's C.E.O. is 'mortified' after fliers are stranded," The New York Times; Zeller, T. (2007, Feb. 16), "Held hostage on the tarmac: Time for a passenger bill of rights?" The New York Times; Bryce, D.J., and J.H. Dyer (2007, May), "Strategies to crack well-guarded markets," Harvard Business Review, Kim, C.W., and R. Manborgne (2005), Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant (Boston: Harvard Business School Publishing); Friedman, T. (2005), The World Is Flat: A Brief History of the Twenty-First Century (New York: Farrar, Strauss and Giroux); and Neeleman, D. (2003, Apr. 30), "Entrepreneurial thought leaders lecture," Stanford Technology Ventures

2. This discussion is based on: Porter, M.E. (2008, January), "The five competitive forces that shape strategy," Harvard Business Review; Porter, M.E. (1996, November-December), "What is strategy?" Harvard Business Review, Porter, M.E. (1985), Competitive Advantage: Creating and Sustaining Superior Performance (New York: Free Press); and Porter, M.E. (1980), Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: Free Press).

- 3. These questions are based on: Priem, R. (2007), "A consumer perspective on value creation," Academy of Management Review 32: 219-235; Abell, D.F. (1980), Defining the Business: The Starting Point of Strategic Planning (Englewood Cliffs, NJ: PrenticeHall); and Porter, M.E. (1996, November-December), "What is strategy?" Harvard Business Review.
- 4. The discussion of generic business strategies is based on: Porter, M.E. (1980), Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: Free Press); Porter, M.E. (1985), Competitive Advantage: Creating and Sustaining Superior Performance (New York: Free Press); Porter, M.E. (1996, November-December), "What is

- strategy?" Harvard Business Review; and Porter, M.E. (2008, January), "The five competitive forces that shape strategy," Harvard Business Review.
- 5. Porter, M.E. (1996, November-December), "What is strategy?" *Harvard Business Review*.
- To decide if and how to divide the market, you can apply the market segmentation techniques you have acquired in your marketing and microeconomics classes.
- 7. This example is drawn from: "Companies are racing to add value to water," The Economist (2017, Mar. 25).
- 8. Christensen, C.M., and M.E. Raynor (2003), The Innovator's Solution: Creating and Sustaining Successful Growth (Boston: Harvard Business School Press).
- 9. The interested reader is referred to the strategy, marketing, and economics literatures. A good start in the strategy literature is the classic work of M.E. Porter: Porter, M.E. (1980), Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: Free Press); Porter, M.E. (1985), Competitive Advantage: Creating and Sustaining Superior Performance (New York: Free Press); and Porter, M.E. (2008, January), "The five competitive forces that shape strategy," Harvard Business Review.
- 10. www.oxo.com/about.jsp.
- 11. Hsieh, T. (2010), Delivering Happiness: A Path to Prafits, Passion, and Purpose (New York: Business Plus).
- 12. "Amazon opens wallet, buys Zappos," The Wall Street Journal (2009, Jul. 23).
- 13. "Where in the Dickens can you find a Trader Joe's," store listing at www.traderjoes. com/pdf/locations/all-flocations.pdf; "Ten companies with excellent customer service," *Huffington Post* (2014, Aug. 15), www.huffingtonpost.com/2013/08/15/ best-customer-service\_n\_3720052.html.
- 14. Olivarez-Giles, N. (2015, Jul. 7), "Project Fi review: Google masters Wi-Fi calling, but needs better phones," *The Wall Street Journal*, Duran M. (2015, Jul. 7), "Google's Project Fi wireless service is crazy cheap. But should you switch?" *Wired*.
- 15. "Flights of hypocrisy," The Economist (2015, Apr. 25).
- 16. "Boeing 787: Orders and Deliveries (updated monthly)," The Boeing Co. (2019, February), www.boeing.com.

- "Airbus: Orders and deliveries," www.airbus.com/aircraft/market/orders-deliveries.html (accessed March 21, 2019).
- 18. Microsoft Annual Report (various years).
- 19. "Nucor's new plant project still on hold," The Associated Press (2009, Jul. 23), www.nucor.com.
- 20. On strategy as simple rules, see: Sull, D., and K.M. Eisenhardt (2015), Simple Rules: How to Thrive in a Complex World (New York: Houghton Mifflin Harcourt).
- 21. Gladwell, Malcolm. Tipping Point: How Little Things Can Make a Big Difference. Turtleback Books, 2002, 301.
- 22. Wall, R. (2019, Feb. 14), "Airbus to retire the A380, the superjumbo that never quite took off," The Wall Street Journal.
- 23. Levitt, B., and J.G. March (1988), "Organizational learning," *Annual Review of Sociology* 14: 319-340.
- 24. For insightful reviews and syntheses on the learning-curve literature, see: Argote, L., and G. Todorova (2007), "Organizational learning: Review and future directions," International Review of Industrial and Organizational Psychology 22: 193-234; and Yelle, L.E. (1979), "The learning curve; Historical review and comprehensive survey," Decision Sciences 10: 302-308.
- 25. Wright, T.P. (1936), "Factors affecting the cost of airplanes," *Journal of Aeronautical Sciences* 3: 122-128.
- 26. The Tesla example draws on: Dyer, J., and H. Gregersen (2016, Aug. 24), "Tesla's innovations are transforming the auto industry," Forbes, Higgins T. (2017, Apr. 10), "How Tesla topped GM as most valuable U.S. automaker," The Wall Street Journal Tech Talk; "Tesla increases deliveries of electric cars," The Economist (2017, Apr. 6); Tesla Annual Report (various years); and GM Annual Report (various years);
- 27. Dyer, J., and H. Gregersen (2016, Aug. 24). "Tesla's innovations are transforming the auto industry," Forbes. The authors (in conjunction with David Kryscynski of Brigham Young University) estimate that the functional relationship between production volume and production cost for Tesla's Model S between 2012 and 2014 is

 $Y = 1726.5* (X^-0.363)$ 

Data underlying Exhibit 6.6:

Units	Per-Unit Cost (\$)	
100	\$324,464	
500	\$180,901	
1,000	\$140,659	
1,500	\$121,407	
2,000	\$109,369	
2,500	\$100,859	
3,000	\$94,400	
3,500	\$89,263	
4,000	\$85,039	
4,500	\$81,480	
5,000	\$78,422	
5,500	\$75,756	
6,000	\$73,400	
6,500	\$71,298	
7,000	\$69,406	
7,500	\$67,689	
8,000	\$66,122	
8,500	\$64,683	
9,000	\$63,354	
9,500	\$62,123	
10,000_	\$60,977	
10,500	\$59,907	
11,000	\$58,903	
11,500	\$57,961	
12,000	\$57,072	

28. The exact data for learning curves depicted in Exhibit 6.7 are depicted below. A simplifying assumption is that the manufacturing of one aircraft costs \$100 million, from there the two different learning curves set in. Noteworthy, that while making only one aircraft costs \$100 million, when manufacturing over 4,000 aircraft the expected per-unit cost falls to only \$28 million (assuming a 90 percent learning curve) and only \$7 million (assuming an 80 percent learning curve).

Learning Curves				
	Per-Unit Cost*			
Units	90%	80%		
1	\$100	\$100		
2	90	80		
4	81	64		
8	73	51		
16	66	41		
32	59	33		
64	53	26		
128	48	21		
256	43	_17		
512	39	13_		
1,024	35	11		
2,048	31	9		
4,096	28	7		

- \* Rounded to full dollar value in millions.
- 29. This discussion is based on: Gulati, R., D. Lavie, and H. Singh (2009), "The nature of partnering experience and the gain from alliances," Strategic Management Journal 30: 1213-1233; Thompson, P. (2001), "How much did the liberty shipbuilders learn? New evidence from an old case study," Journal of Political Economy 109: 103-137; Edmondson, A.C., R.M. Bohmer, and G.P. Pisano (2001), "Disrupted routines: Team learning and new technology implementation in hospitals," Administrative Science Quarterly 46: 685-716; Pisano, G.P., R.M. Bohmer, and A.C. Edmondson (2001), "Organizational differences in rates of learning: Evidence from the adoption of minimally invasive cardiac surgery," Management Science 47: 752-768; Rothaermel, F.T., and D.L. Deeds (2006), "Alliance type, alliance experience, and alliance management capability in high-technology ventures," Journal of Business Venturing 21: 429-460; Hoang, H., and F.T. Rothaermel (2005), "The effect of general and partner-specific alliance experience on joint R&D project performance," Academy of Management Journal 48: 332-345; Zolio, M., J.J. Reuer, and H. Singh (2002), "Interorganizational routines and performance in strategic alliances," Organization Science 13: 701-713; King, A.W., and A.L. Ranft (2001), "Capturing knowledge

and knowing through improvisation: What managers can learn from the thoracic surgery board certification process," Journal of Management 27: 255-277; and Darr, E.D., L. Argote, and D. Epple (1995), "The acquisition, transfer and depreciation of knowledge in service organizations: Productivity in franchises," Management Science 42: 1750-1762.

- 30. Ramanarayanan, S. (2008), "Does practice make perfect: An empirical analysis of learning-by-doing in cardiac surgery." Available at SSRN: http://ssrn.com/ abstract=1129350.
- 31. "Coronary artery bypass grafting," (2015), healthcarebluebook.com, doi:10.1016/B978-1-84569-800-3.50011-5; Gokhale, K. (2013, Jul. 29), "Heart surgery in India for \$1,583 Costs \$106,385 in U.S., Bloomberg Businessweek, and Anand, G. (2009, Nov. 25), "The Henry Ford of heart surgery," The Wall Street Journal. See also: "Cardiac surgeon salary (United States)," Payscale.com, survey updated July 18, 2015; Pearl, R. (2014, Mar. 27), "Offshoring American he alth care: Higher quality at Lower costs?" Forbes.
- 32. Boston Consulting Group (1972), Perspectives on Experience (Boston: Boston Consulting Group).
- See data presented in Endnote 28.
- 34. Anand, G. (2009, Nov. 25), "The Henry Ford of heart surgery," The Wall Street Journal.
- 35. This discussion is based on: Porter, M.E. (1979, March-April), "How competitive forces shape strategy," Harvard Business Review: 137-145; Porter, M.E. (1980), Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: Free Press); and Porter, M.E. (2008, January), "The five competitive forces that shape strategy," Harvard Business Review.
- 36. As of Q1 2019, the exact market share for Google's Android was 74.2 percent and for Apple's iOS was 23.3 percent, thus together they hold 97.5 percent of the entire mobile operating system market globally. Data drawn from http://gs.statcounter.com/os-marketshare/mobile/worldwide (accessed March 22, 2019).
- 37. This discussion is based on: Kim, C.W., and R. Mauborgne (2017), Blue Ocean Shift: Beyond Competing-Proven Steps to Inspire Confidence and Seize New Growth (New York: Hachette); Kim, C.W., and R. Mauborgne (2005), Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant (Boston: Harvard Business School Publishing); Miller, A., and G.G. Dess (1993), "Assessing Porter's model

in terms of its generalizability, accuracy, and simplicity," Journal of Management Studies 30: 553-585; and Hill, C.W.L. (1988),

- "Differentiation versus low cost or differentiation and low cost: A contingency framework," Academy of Management Review 13: 401-412.
- 38. Kim, C.W., and R. Mauborgne (2005), Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant (Boston: Harvard Business School Publishing); Miller, A., and G.G. Dess (1993), "Assessing Porter's model in terms of its generalizability, accuracy, and simplicity," Journal of Management Studies 30: 553-585; and Hill, C.W.L. (1988), "Differentiation versus low cost or differentiation and low cost: A contingency framework," Academy of Management Review 13: 401-412
- 39. Kim, C.W., and R. Mauborgne (2005), Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant (Boston: Harvard Business School Publishing); Miller, A., and G.G. Dess (1993), "Assessing Porter's model in terms of its generalizability, accuracy, and simplicity," Journal of Management Studies 30: 553-585; and Hill, C.W.L. (1988), "Differentiation versus low cost or differentiation and low cost: A contingency framework," Academy of Management Review 13: 401-412.
- 40. Kim, C.W., and R. Mauborgne (2005), Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant (Boston: Harvard Business School Publishing); Miller, A., and G.G. Dess (1993), "Assessing Porter's model in terms of its generalizability, accuracy, and simplicity," Journal of Management Studies 30: 553-585; and Hill, C.W.L. (1988), "Differentiation versus low cost or differentiation and low cost: A contingency framework," Academy of Management Review 13: 401-412
- 41. The IKEA example is drawn from: "IKEA: How the Swedish retailer became a global cult brand," Bloomberg Businessweek (2005, Nov. 14); Edmonds, M. (2008, Jul. 8), "How IKEA works," http://money. howstnffworks.com/; and www.ikea.com.
- 42. "IKEA: How the Swedish retailer became a global cult brand," Bloomberg Businessweek (2005, Nov. 14).
- 43. This discussion is based on: Porter, M.E. (1980), Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: Free Press); and Porter, M.E. (1996, November-December), "What is strategy?" Harvard Business Review: 61-78.

- 44. Cirque du Soleil at a Glance, www. cirquedusoleil.com/en/home/about-us/ at-a-glance.aspx.
- 45. Cirque du Soleil at a Glance, www. cirquedusoleil.com/en/home/about-us/at-a-glance.aspx.
- 46. Sources: Ambler, P. (2019, Mar. 21), "Voices of success: Cirque du Soleil chairman's biggest 'ah ha' moment in business," Forbes video, www.forbes.com/video/6016335943001/#4371b2425fe6; Picker, L. (2017, Jul. 6), "Private equity-backed Cirque du Soleil inks deal for Blue Man Group as it looks to expand beyond circus," CNBC; "Son of a Cirque du Soleil founder killed on set," The Wall Street Journal / Associated Press

(2016, Nov. 30); Berzon, A., and M. Maremont (2015, Apr. 24), "The perils of workers' compfor injured Cirque du Soleil performers," The Wall Street Journal, WSJ video on Cirque du Soleil, www.wsj.com/articles/ injuries-putsafety-in-spotlight-at-cirque-dusoleil-1429723558; Berzon, A., and M. Maremont (2015, Apr. 22), "Injuries put safety in spotlight at Cirque du Soleil," The Wall Street Journal; King, C. (2015, Apr. 20), "Cirque du Soleil being sold to private-equity group," The Wall Street Journal; Berzon, A. (2014, Dec. 1), "Cirque du Soleil's next act: Rebalancing the business," The Wall Street Journal; Sylt, C. (2015, Feb. 22), "Cirque du Soleil tour revenue tumbles to £40m," The

- Telegraph; and Kim, W.C., and Mauborgne, R. (2005), Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant (Boston: Harvard Business Review Press).
- 47. Vranica S. (2015, Feb. 22), "JetBlue's plan to repair its brand," *The Wall Street Journal*.
- 48. Sources for this myStrategy include: Kantor, J., and D. Streitfeld (2015, Aug. 15), "Inside Amazon: Wrestling big ideas in a bruising workplace," *The New York Times*; "100 best companies to work for," *Fortune*, 2014, 2015; and www.glassdoor.com.
- "McKinsey on semiconductors,"
   McKinsey & Co. (2011, Autumn).