Chapter 2

Strategic Leadership: Managing the Strategy Process

Chapter Outline

Learning Objectives

LO 2-1 Describe the roles of vision, mission, and values in the strategic management process.

LO 2-2 Evaluate the strategic implications of product-oriented and customer-oriented vision statements.

LO 2-3 Explain why anchoring a firm in ethical core values is essential for long-term success.

LO 2-4 Outline how managers become strategic leaders.

LO 2-5 Describe the roles of corporate, business, and functional managers in strategy formulation and implementation.

LO 2-6 Evaluate top-down strategic planning, scenario planning, and strategy as planned emergence.

CHAPTERCASE 2

Marissa Mayer: Turnaround at Yahoo?

APPOINTED CEO IN 2012, Marissa Mayer has just one job at Yahoo: Turn it around.

Yahoo was once the go-to Internet leader, a web portal with e-mail and finance, sports, social media, and video-sharing services. Advertisers loved it. During the peak of the Internet boom, Yahoo's share price reached an all-time high of close to $120. In 2000 when the bubble burst, Yahoo's stock sank to $5. Despite rebounding as high as $40 in the mid-2000s, the stock had long hovered around $15 by the time Mayer got the job. From its peak to Mayer's hiring, Yahoo's stock valuation (share price × number of outstanding shares) lost more than 80 percent, falling from $125 billion to a mere $20 billion.

Marissa Mayer, CEO Yahoo.
© AP Photo/Julie Jacobson

You can measure Yahoo's challenges by CEO turnover. When Mayer took the job, she became the fifth CEO in three years. So who is Marissa Mayer to break the Yahoo CEO jinx? How is she turning Yahoo around?

PRE-YAHOO

Mayer grew up in Wausau, Wisconsin, but took her higher education and built her career in California's Silicon Valley. She entered Stanford University in 1993, majoring in symbolic systems, a discipline that combines cognitive sciences, artificial intelligence, and human-computer interaction. Still at Stanford, Mayer earned a master's degree in computer science. On graduation in 1999, she declined over a dozen job offers, ranging from prestigious consulting firms to top-tier universities. Instead she went to a garage that housed a small startup with a handful of employees, just a few months old. It was called Google.

Google's 20th hire and its first female engineer, Mayer became a star. With a superior skill set and strong work ethic, she rose quickly to the rank of vice president. She helped develop many of Google's best known features: Gmail, images, news, and maps. In particular, she designed the functionality and uncluttered look and feel of Google's iconic search site. Mayer is known for her attention to detail, her commitment of time, and her desire to provide the very best user experience possible, putting products before profits. She maintains that if you build the best products possible, profits will come.

In 2012 Yahoo's site had long been stale. The former search leader was third in traffic behind Google and Bing. No doubt Mayer's pedigree at Google appealed to the Yahoo board. She was deeply involved in everything that Google had done right. And she was ready.

AT YAHOO

Mayer's first acts at Yahoo revolved around culture and cash. To change Yahoo's culture, she retooled the company's vision and mission statements. (We'll visit them later in the chapter.) She also took on Yahoo's organizational culture. Yahoo had become overly bureaucratic and lost the zeal characteristic of high-tech startups. Many Yahoo employees worked from home. For those who worked in the office, weekends began Thursday afternoons, leaving empty parking garages at Yahoo's campus in Sunnyvale, California.

In response, Mayer withdrew the option to work remotely. All of Yahoo's 12,000 employees would have to come to the office. She also installed a weekly town-hall style meeting called FYI to review Yahoo's progress and take questions. All Yahoo employees were expected to attend, either in person or via satellite link if they did not work in the Sunnyvale offices—every Friday afternoon.

To raise cash, Mayer sold part of Yahoo's ownership stake in Alibaba, the Chinese e-commerce company, for over $6 billion. Mayer spent about $2 billion acquiring more than three dozen tech ventures, including $1.1 billion for microblogging and social networking site Tumblr and $640 million for video ad company BrightRoll. The acquisitions filled gaps in product line and brought in new engineering talent.

Is it working? A number of signs are positive. By 2015, Yahoo's various websites had more than 800 million monthly visitors, with 400 million of those on mobile devices, up from a mere 160 million in 2014. Yahoo's market cap has more than doubled to over $45 billion, and its share price has more than tripled since Mayer's appointment as CEO.[1]

You will learn more about Yahoo by reading this chapter; related questions appear on page 55.

HOW DO STRATEGIC LEADERS like Marissa Mayer develop and implement a vision for their company to achieve strategic goals? How do they guide and motivate employees? In Chapter 2, we move from thinking about why strategy is important to considering how firms and other organizations define their vision, mission, and values, and how strategic leaders manage the strategy process across different levels in the organization. We also explore some of the frameworks they use to develop strategy. And finally, we summarize some of the most important practical insights in our "Implications for the Strategist."

LO 2-1

Describe the roles of vision, mission, and values in the strategic management process.

2.1 Vision, Mission, and Values

An effective **strategic management process** lays the foundation for sustainable competitive advantage. Strategic leaders design a process to formulate and implement strategy. **Strategic leadership** pertains to executives' use of power and influence to direct the activities of others when pursuing an organization's goals.[2] The first step in this process is to define a firm's vision, mission, and values.

strategic management process Method put in place by strategic leaders to formulate and implement a strategy, which can lay the foundation for a sustainable competitive advantage.

strategic leadership Executives' use of power and influence to direct the activities of others when pursuing an organization's goals.

To define these basic principles, strategic leaders can ask these questions:

- **Vision.** What do we want to accomplish ultimately?
- **Mission.** How do we accomplish our goals?
- **Values.** What commitments do we make, and what guardrails do we put in place, to act both legally and ethically as we pursue our vision and mission?

Because the vision succinctly identifies the primary goal of the organization, it is the first item to define. Strategic leaders need to begin with the end in mind.[3] In fact, early on strategic success is created *twice.* Leaders create the vision in the abstract by formulating strategies that enhance the chances of gaining and sustaining competitive advantage, before any actions of strategy implementation are taken in a second round of strategy creation. This process is similar to building a house. The future owner must communicate her vision to the architect, who draws up a blueprint of the home for her review. The process is iterated a couple of times until all the homeowner's ideas have been translated into the blueprint. Only then does the building of the house begin. The same holds for strategic success; it is first created through strategy formulation based on careful analysis before any actions are taken. Because the vision succinctly identifies the primary objective of the organization, it is the first item to define. Let's look at this process in more detail.

VISION

A **vision** captures an organization's aspiration and spells out what it ultimately wants to accomplish. An effective vision pervades the organization with a sense of winning and motivates employees at all levels to aim for the same target, while leaving room for individual and team contributions. Marissa Mayer developed a new vision for Yahoo—*to make the world's daily habits more inspiring and entertaining*—to help reinvigorate Yahoo's employees and get its customers excited again. Mayer's vision attempts to inspire Yahoo's employees to resume leadership in online advertising.

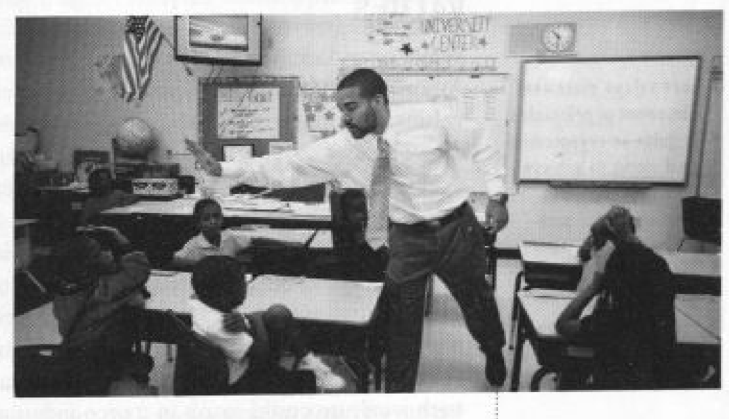
vision A statement about what an organization ultimately wants to accomplish; it captures the company's aspiration.

Employees in visionary companies tend to feel part of something bigger than themselves. An inspiring vision helps employees find meaning in their work. Beyond monetary rewards, it allows employees to experience a greater sense of purpose. People have an intrinsic motivation to make the world a better place through their work activities.[4] This greater individual purpose can in turn lead to higher organizational performance.[5] Basing actions on its vision, a firm will build the necessary resources and capabilities through continuous organizational learning, including learning from failure, to translate into reality what begins as a stretch goal or *strategic intent.*[6]

To provide meaning for employees in pursuit of the organization's ultimate goals, vision statements should be forward-looking and inspiring. Consider, for example, the vision of the nonprofit organization Teach for America (TFA): *One day, all children in this nation will have the opportunity to attain an excellent education.*[7] That vision effectively and clearly communicates what TFA ultimately wants to accomplish, while providing an inspiring target.

It's not surprising that vision statements can be inspiring and motivating in the nonprofit sector. Many people would find meaning in wanting to help children attain an excellent education (TFA) or wanting *to be always there,* touching the lives of people in need, the vision of the American Red Cross. But what about for-profit firms?

Many companies in the for-profit sector measure success primarily by financial performance. However, this is not always the case. Visionary companies, such as 3M, General Electric, Procter & Gamble (P&G), and Walmart, provide more aspirational ideas that are not exclusively financial. The upscale retailer Nordstrom's vision, for example, is *to provide outstanding service every day, one customer at a time.* Visionary companies often outperform their competitors over the long run. Tracking the stock market performance of companies over several decades, strategy scholars found that visionary companies outperformed their peers by a wide margin.[8] A truly meaningful and inspiring vision makes employees feel they are part of something bigger. This is highly motivating and, in turn, can improve financial performance.



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Moreover, more companies big and small are responding to the desire of society and individual employees to find meaning in work, beyond financial success.[9] While sometimes the effort results in overreach, the trend appears to be positive. For example, Travelzoo CEO Chris Loughlin is convinced that, "If we all traveled, there would be significantly more peace on Earth." Less specific but also lofty is the take of a motorcycle marketing director at a recent investor conference: "There is a higher purpose to the Harley-Davidson brand that is more than motorcycles." One possible explanation for this shift has to do with the increasing demands of work. "In part, professionals are demanding more meaning from their careers because work simply takes up more of life than before, thanks to longer hours, competitive pressures and technological tethers of the modern job."[10]

MISSION

mission
Description of what an organization actually does—the products and services it plans to provide, and the markets in which it will compete.

Building on the vision, organizations establish a **mission**, which describes what an organization actually does—that is, the products and services it plans to provide, and the markets in which it will compete. People sometimes use the terms *vision* and *mission* interchangeably, but in the strategy process they differ.

- A vision defines what an organization wants to accomplish ultimately, and thus the goal can be described by the verb *to*. For instance, TFA's vision is *to attain an excellent education for all children.*
- A mission describes what an organization does; it defines the means *by* which vision is accomplished. Accordingly, TFA says it will achieve its vision *by enlisting our nation's most promising future leaders in the effort.*

strategic commitments
Actions to achieve the mission that are costly, long-term oriented, and difficult to reverse.

To be effective, firms need to back up their visions and missions with **strategic commitments**, in which the enterprise puts its money where its mouth is. Such commitments are costly, long-term oriented, and difficult to reverse.[11] For instance, the vision of EADS, the parent company of Airbus, is *to be the world's leading aerospace company.* Airbus translates this ultimate goal into its mission *by manufacturing the world's best aircraft, with passengers at heart and airlines in mind.* In service of its mission, Airbus spent 10 years and $15 billion to develop the A380 super jumbo, which can accommodate over 850 passengers and fly almost 10,000 miles, a sufficient range to fly non-stop from New York to Singapore. The company's vision is backed by a powerful strategic commitment. However noble the mission statement, for competitive advantage companies still need strategic actions informed by economic fundamentals of value creation.

Consider the strategic commitments made by Mayer to help turn Yahoo around. Its sale of Alibaba holdings and purchases of various startups show the kind of bold commitment required of strategic leaders. To retain existing talent and restore morale, she also had to sell her workers on the new vision and mission. She did so by sharing this mantra with them via tweets and other means: *People then products then traffic then revenue.* Employees understood they were the start of the transformation.

VALUES

core values statement
Statement of principles to guide an organization as it works to achieve its vision and fulfill its mission, for both internal conduct and external interactions; it often includes explicit ethical considerations.

While many companies have powerful vision and mission statements, they are not enough. An organization's values should also be clearly articulated in the strategy process. A **core values statement** matters because it provides touchstones for the employees to understand the company culture. It offers bedrock principles that employees at all levels can use to deal with complexity and to resolve conflict. Such statements can help provide the organization's employees with a moral compass.

Consider that much of unethical behavior, while repugnant, may not be illegal. Often we read the defensive comment from a company under investigation or fighting a civil suit that "we have broken no laws." However, any firm that fails to establish extra-legal, ethical standards will be more prone to behaviors that can threaten its very existence. A company whose culture is silent on moral lapses breeds further moral lapses. Over time such a culture could result in a preponderance of behaviors that cause the company to ruin its reputation, at the least, or slide into outright legal violations with resultant penalties and punishment, at the worst.

EXHIBIT 2.1 / Teach for America: Vision, Mission, and Values

VISION	One day, all children in this nation will have the opportunity to attain an excellent education.
MISSION	Teach for America is growing the movement of leaders who work to ensure that kids growing up in poverty get an excellent education.
VALUES	**Transformational Change:** We seek to expand educational opportunity in ways that are life-changing for children and transforming for our country. Given our deep belief in children and communities, the magnitude of educational inequity and its consequences, and our optimism about the solvability of the problem, we act with high standards, urgency, and a long-term view. **Leadership:** We strive to develop and become the leaders necessary to realize educational excellence and equity. We establish bold visions and invest others in working towards them. We work in purposeful, strategic, and resourceful ways, define broadly what is within our control to solve, and learn and improve constantly. We operate with a sense of possibility, persevere in the face of challenges, ensure alignment between our actions and beliefs, and assume personal responsibility for results. **Team:** We value and care about each other, operate with a generosity of spirit, and have fun in the process of working together. To maximize our collective impact, we inspire, challenge, and support each other to be our best and sustain our effort. **Diversity:** We act on our belief that the movement to ensure educational equity will succeed only if it is diverse in every respect. In particular, we value the perspective and credibility that individuals who share the racial and economic backgrounds of the students with whom we work can bring to our organization, classrooms, and the long-term effort for change. **Respect & Humility:** We value the strengths, experiences, and perspectives of others, and we recognize our own limitations. We are committed to partnering effectively with families, schools, and communities to ensure that our work advances the broader good for all children.

Source: www.teachforamerica.org.

To see how all three components—vision, mission, and values—work together, see Exhibit 2.1, which provides a snapshot of aspirations at Teach for America.

LO 2-2
Evaluate the strategic implications of product-oriented and customer-oriented vision statements.

Do vision statements help firms gain and sustain competitive advantage? It depends. The effectiveness of vision statements differs based on type. *Customer-oriented* vision statements allow companies to adapt to changing environments. *Product-oriented* vision statements often constrain this ability. This is because customer-oriented vision statements focus employees to think about how best to solve a problem for a consumer.[12] Clayton Christensen shares how a customer focus let him help a fast-food chain increase sales of milk shakes.[13] The company approached Christensen after it had made several changes to its milk-shake offering based on extensive customer feedback but sales failed to improve. Rather than asking customers what kind of milk shake they wanted, he thought of the problem in a different way. He observed customer behavior and then asked customers, "What job were you trying to do that caused you to hire that milk shake?"[14] He wanted to know what problem the customers were trying to solve. Surprisingly he found that roughly half of the milk shakes were purchased in the mornings, because customers wanted an easy breakfast to eat in the car and a diversion on long commutes. Based on the insights gained from this problem-solving perspective, the company expanded its milk-shake offerings to include healthier options with fruit chunks and provided a prepaid dispensing machine to speed up the drive-through, and thus improve customers' morning commute. A customer focus made finding a solution much easier.

You could say that the restaurant company had a product orientation that prevented its executives from seeing unmet customer needs. Product-oriented vision statements focus employees on improving existing products and services without consideration of underlying customer problems to be solved. Our environments are ever-changing and sometimes seem chaotic. The increased strategic flexibility afforded by customer-oriented vision statements can provide companies with a competitive advantage.[15] Let's look at both types of vision statements in more detail.

PRODUCT-ORIENTED VISION STATEMENTS. A product-oriented vision defines a business in terms of a good or service provided. Product-oriented visions tend to force managers to take a more myopic view of the competitive landscape. Consider the strategic decisions of U.S. railroad companies. Railroads are in the business of moving goods and people from point A to point B by rail. When they started in the 1850s, their short-distance competition was the horse or horse-drawn carriage. There was little long-distance competition (e.g., ship canals or good roads) to cover the United States from coast to coast. Because of their monopoly, especially in long-distance travel, these companies were initially extremely profitable. Not surprisingly, the early U.S. railroad companies saw their vision as being in the railroad business, clearly a product-based definition.

However, the railroad companies' monopoly did not last. Technological innovations changed the transportation industry dramatically. After the introduction of the automobile in the early 1900s and the commercial jet in the 1950s, consumers had a wider range of choices to meet their long-distance transportation needs. Rail companies were slow to respond; they failed to redefine their business in terms of services provided to the consumer. Had they envisioned themselves as serving the full range of transportation and logistics needs of people and businesses across America (a customer-oriented vision), they might have become successful forerunners of modern logistics companies such as FedEx or UPS.

Recently, the railroad companies seem to be learning some lessons: CSX Railroad is now redefining itself as a green-transportation alternative. It claims it can move one ton of freight 423 miles on one gallon of fuel. However, its vision remains product-oriented: *to be the safest, most progressive North American railroad.*

CUSTOMER-ORIENTED VISION STATEMENTS. *A customer-oriented vision* defines a business in terms of providing solutions to customer needs. For example, "We provide solutions to professional communication needs." Companies with customer-oriented visions can more easily adapt to changing environments. Exhibit 2.2 provides additional examples of companies with customer-oriented vision statements. In contrast, companies that define themselves based on product-oriented statements (e.g., "We are in the typewriter business") tend to be less flexible and thus more likely to fail. The lack of an inspiring needs-based vision can cause the long-range problem of failing to adapt to a changing environment.

EXHIBIT 2.2 Companies with Customer-Oriented Vision Statements

Amazon: To be earth's most customer centric company; to build a place where people can come to find and discover anything they might want to buy online.
Alibaba: To make it easy to do business anywhere.
GE: To turn imaginative ideas into leading products and services that help solve some of the world's toughest problems.
Google: To organize the world's information and make it universally accessible and useful.
IBM: To be the best service organization in the world.
Microsoft: To enable people and businesses throughout the world to realize their full potential.
Nike: To bring inspiration and innovation to every athlete in the world.
Walmart: To give ordinary folk the chance to buy the same thing as rich people.
Yahoo: To make the world's daily habits more inspiring and entertaining.

Customer-oriented visions identify a critical need but leave open the means of how to meet that need. Customer needs may change, and the *means* of meeting those needs can change. The future is unknowable, and innovation may provide new ways to meet needs that we cannot fathom today.[16] For example, consider the need to transmit information over long distances. Communication needs have persisted throughout the millennia, but the technology to solve this problem has changed drastically over time.[17] During the reign of Julius Caesar, moving information over long distances required papyrus, ink, a chariot, a horse, and a driver. During Abraham Lincoln's time, railroads handled this task, while an airplane was used when Franklin Delano Roosevelt was president. Today, we use connected mobile devices to move information over long distances at the speed of light. The problem to be solved—moving information over long distance—has remained the same over the millennia, but the technology employed to do this job has changed quite drastically. Christensen recommends that strategic leaders think hard about how the means of getting a job done have changed over time and ask themselves, "Is there an even better way to get this job done?"

It is critical that an organization's vision should be flexible to allow for change and adaptation. Consider how Ford Motor Company has addressed the problem of personal mobility over the past 100 years. Before Ford entered the market in the early 1900s, people traveled long distances by horse-drawn buggy, horseback, boat, or train. But Henry Ford had a different idea. In fact, he famously said, "If I had listened to my customers, I would have built a better horse and buggy."[18] Instead, Henry Ford's original vision was *to make the automobile accessible to every American.* He succeeded, and the automobile dramatically changed how mobility was achieved.

Fast-forward to today: Ford Motor Company's vision is *to provide personal mobility for people around the world.* Note that it does not even mention the automobile. By focusing on the consumer need for personal mobility, Ford is leaving the door open for exactly how it will fulfill that need. Today, it's mostly with traditional cars and trucks propelled by gas-powered internal combustion engines, with some hybrid electric vehicles in its lineup. In the near future, Ford is likely to provide vehicles powered by alternative energy sources such as electric power or hydrogen. In the far-reaching future, perhaps Ford will get into the business of individual flying devices. Throughout all of this, its vision would still be relevant and compel its managers to engage in future markets. In contrast, a product-oriented vision would have greatly constrained Ford's degree of strategic flexibility.

MOVING FROM PRODUCT-ORIENTED TO CUSTOMER-ORIENTED VISION STATEMENTS. In some cases, product-oriented vision statements do not interfere with the firm's success in achieving superior performance and competitive advantage. Consider Intel Corporation, one of the world's leading silicon innovators. Intel's early vision was *to be the preeminent building-block supplier of the PC industry.* Intel designed the first commercial microprocessor chip in 1971 and set the standard for microprocessors in 1978. During the personal computer (PC) revolution in the 1980s, microprocessors became Intel's main line of business. Intel's customers were original equipment manufacturers that produced consumer end-products, such as computer manufacturers HP, IBM, Dell, and Compaq.

In the Internet age, though, the standalone PC as the end-product has become less important. Customers want to stream video and share selfies and other pictures online. These activities consume a tremendous amount of computing power. To reflect this shift, Intel in 1999 changed its vision to focus on being *the preeminent building-block supplier to the Internet economy.* Although its product-oriented vision statements did not impede performance or competitive advantage, in 2008 Intel fully made the shift to a customer-oriented vision: *to delight our customers, employees, and shareholders by relentlessly delivering the platform and technology advancements that become essential to the way we work and live.*

Part of this shift was reflected by the hugely successful "Intel Inside" advertising campaign in the 1990s that made Intel a household name worldwide.

Intel accomplished superior firm performance over decades through continuous adaptations to changing market realities. Its formal vision statement lagged behind the firm's strategic transformations. Intel regularly changed its vision statement *after* it had accomplished each successful transformation.[19] In such a case, vision statements and firm performance are clearly not related to one another.

Taken together, empirical research shows that sometimes vision statements and firm performance are *associated* with one another. A positive relationship between vision statements and firm performance is more likely to exist under certain circumstances:

- The visions are customer-oriented.
- Internal stakeholders are invested in defining the vision.
- Organizational structures such as compensation systems align with the firm's vision statement.[20]

LO 2-3

Explain why anchoring a firm in ethical core values is imperative for long-term success.

The upshot is that an effective vision statement can lay the foundation upon which to craft a strategy that creates competitive advantage.

organizational core values Ethical standards and norms that govern the behavior of individuals within a firm or organization.

Organizational core values are the ethical standards and norms that govern the behavior of individuals within a firm or organization. Strong ethical values have two important functions. First, they form a solid foundation on which a firm can build its vision and mission, and thus lay the groundwork for long-term success. Second, values serve as the guardrails put in place to keep the company on track when pursuing its vision and mission in its quest for competitive advantage.

The values espoused by a company provide answers to the question, *how do we accomplish our goals?* They help individuals make choices that are both ethical and effective in advancing the company's goals. Strategy Highlight 2.1, featuring the pharmaceutical company Merck, provides an example of how values can drive strategic decision making, and what can happen if a company deviates from its core values.

One last point about organizational values: Without commitment and involvement from top managers, any statement of values remains merely a public relations exercise. Employees tend to follow values practiced by strategic leaders. They observe the day-to-day decisions of top managers and quickly decide whether managers are merely paying lip service to the company's stated values. Organizational core values must be lived with integrity, especially by the top management team. Unethical behavior by top managers is like a virus that spreads quickly throughout an entire organization. It is imperative that strategic leaders set an example of ethical behavior by living the core values. Since strategic leaders have such a strong influence in setting an organization's vision, mission, and values, we next discuss strategic leadership.

LO 2-4

Outline how managers become strategic leaders.

2.2 Strategic Leadership

Strategic leadership describes the executives' successful use of power and influence to direct the activities of others when pursuing an organization's goals. Executives whose vision and actions enable their organizations to achieve competitive advantage demonstrate strategic leadership.[21] Marissa Mayer demonstrated strategic leadership in defining a new vision and mission for Yahoo. To put Yahoo's new vision and mission into action, she worked to rejuvenate Yahoo's bureaucratic culture and engaged in more open and frequent communication, with weekly FYI town-hall meetings where she and other executives provide updates and field questions.[22] All employees are expected to attend and encouraged to participate in the Q&A. Questions are submitted online during the week, and the employees vote which questions executives should respond to.

Strategy Highlight 2.1

Merck: Reconfirming Its Core Values

Merck CEO Kenneth Frazier

© The Star-Ledger/Saed Hindash/The Image Works

Merck's vision is *to preserve and improve human life.* The words of founder George W. Merck still form the basis of the company's values today: *We try to never forget that medicine is for the people. It is not for profits. The profits follow, and if we have remembered that, they have never failed to appear.*[23]

ENDING RIVER BLINDNESS In 1987, Ray Vagelos, a former Merck scientist turned CEO, announced that the company would donate its recently discovered drug Mectizan, without charge, to treat river blindness. For centuries, river blindness—a parasitic disease that leads to loss of eyesight—plagued remote communities in Africa and other parts of the world. Merck's executives formed a novel private-public partnership, the Mectizan Donation Program (MDP), to distribute the drug in remote areas, where health services are often not available.

After 25 years, more than 1 billion treatments, and some 120,000 communities served, the disease had effectively been eradicated. Merck's current CEO, Kenneth Frazier, announced himself "humbled" by the result of the company's value-driven actions.[24]

WITHDRAWING VIOXX In the case of another drug, though, Merck's values were brought into question. Vioxx was a painkiller developed to produce fewer gastrointestinal side-effects than aspirin or ibuprofen. Once the Food and Drug Administration (FDA) approved the new drug in 1999, Merck engaged in typical big pharma promotional practices:

- Heavy direct-to-consumer advertising via TV and other media.
- Luxury doctor inducements, including consulting contracts and free retreats at exotic resorts.

Merck's new drug was a blockbuster, generating revenues of $2.5 billion a year by 2002 and growing fast.

Allegations began to appear, however, that Vioxx caused heart attacks and strokes. Critics alleged that Merck had suppressed evidence about Vioxx's dangerous side-effects from early clinical trials. In 2004, Merck voluntarily recalled the drug. Merck's CEO at the time, Raymond Gilmartin, framed the situation in terms of knowledge learned *after* the initial release. He said he received a phone call from the head of research. "He told me that our long-term safety study of Vioxx was showing an increased risk of cardiovascular events compared to placebo, and the trial was being discontinued . . . After analyzing the data further and consulting with outside experts, the Merck scientists recommended that we voluntarily withdraw the drug."[25]

Regardless of what Merck knew when, the voluntary withdrawal reconfirmed in a costly way its core value that patients come before profits. Merck's reputation damaged, its stock fell almost 30 percent to $33, eradicating $27 billion in market value almost overnight—an amount much greater than the estimated net present value of the profits that Merck would have obtained from continued sales of Vioxx. Merck has been hit by lawsuits ever since; legal liabilities have cost the company up to $30 billion thus far.

Some corporate social responsibility experts argue that Merck should have never put Vioxx on the market in the first place, or that it should have at least provided up-front, clear assessments of the risks associated with Vioxx.[26]

Mayer took some heat when she announced that Yahoo employees could no longer work from home, but needed to come into the office instead. Her rationale is that working in the same shared space encourages collaboration, teamwork, and the creative spark to foster innovation. She moved out of her corner office and instead works in a cubicle among other Yahoo rank-and-file employees. To ease the transition into now being required to work on the Yahoo campus in Sunnyvale, California, Mayer ordered a renovation and upgrade to Yahoo's cafeteria. Now, gourmet meals—breakfast, lunch, and dinner—are available free for all Yahoos.

There are other less-than-popular changes. Where before Yahoos enjoyed a casual work culture, now they faced a stacked ranking system of employee performance. Managers had to grade their direct reports along a bell curve, with a fixed percentage as "underperforming." Team leaders were now to rank their employees in defined groups: 10 percent in "greatly exceeds," 25 percent in "exceeds," 50 percent in "achieves," 10 percent in "occasionally misses," and 5 percent in "misses." Unintended consequences ensued. High performers refused to work with one another in the same team. Managers cynically traded team members to fill their quotas. Political infighting increased.[27]

While the effect of strategic leaders varies, they still matter to firm performance.[28] Think of great business founders and their impact on the companies they built—Jack Ma at Alibaba, Steve Jobs at Apple, Jeff Bezos at Amazon, and so on. There are also strategic leaders who have shaped and revitalized existing businesses: Tim Cook at Apple, Chung Mong-Koo at Hyundai, Satya Nadella at Microsoft, etc.[29] Or continue with the example of Marissa Mayer. In 2014, *Forbes* listed her as number eight in its annual ranking of the most powerful women in business, just behind other great business leaders such as Mary Barra (GM), Sheryl Sandberg (Facebook), and Virginia Rometty (IBM), among others. One of the world's top business leaders, Mayer, born 1975, is one of the youngest.

At the other end of the spectrum, some CEOs have massively destroyed shareholder value: Charles Prince at Citigroup, Richard Wagoner at GM, Robert Nardelli at The Home Depot and later Chrysler, Martin Winterkorn at VW, and Ron Johnson at JCPenney, among many others.

Why do some leaders create great companies or manage them to greatness, while others lead them into decline and sometimes even demise? To answer that question, let's first consider what strategic leaders actually do.

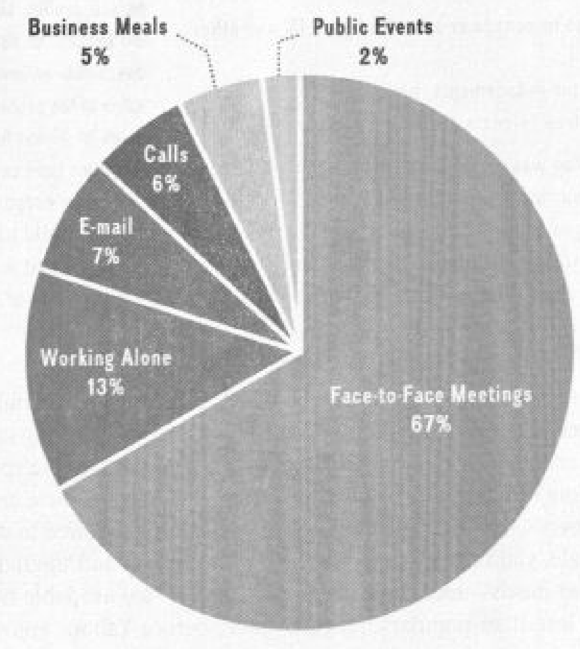
WHAT DO STRATEGIC LEADERS DO?

What do strategic leaders do that makes some strategic leaders more effective than others? In a recent study of more than 350 CEOs, strategy scholars found that they spend, on average, 67 percent of their time in meetings, 13 percent working alone, 7 percent on e-mail, 6 percent on phone calls, 5 percent on business meals, and 2 percent on public events such as ribbon-cutting for a new factory (see Exhibit 2.3).[30] Other studies have also found that

EXHIBIT 2.3 /

How CEOs Spend Their Days

Source: Data from O. Bandiera, A. Prat, and R. Sadun (2012), "Management capital at the top: Evidence from the time use of CEOs," London School of Economics and Harvard Business School Working Paper.



most managers prefer oral communication: CEOs spend most of their time "interacting—talking, cajoling, soothing, selling, listening, and nodding—with a wide array of parties inside and outside the organization."[31] Surprisingly given the advances in information technology, CEOs today spend most of their time in face-to-face meetings. They consider face-to-face meetings most effective in getting their message across and obtaining the information they need. Not only do meetings present data through presentations and verbal communications, but they also enable CEOs to pick up on rich nonverbal cues such as facial expressions, body language, and mood, that are not apparent to them if they use e-mail or Skype, for example.[32]

HOW DO YOU BECOME A STRATEGIC LEADER?

Is becoming an ethical and effective strategic leader innate? Can it be learned? According to the **upper-echelons theory**, organizational outcomes including strategic choices and performance levels reflect the values of the top management team.[33] These are the individuals at the upper echelons, or levels, of an organization. The theory states that executives interpret situations through the lens of their unique perspectives, shaped by personal circumstances, values, and experiences. Their leadership actions reflect characteristics of age, education, and career experiences, filtered through personal interpretations of the situations they face. The upper-echelons theory favors the idea that strong leadership is the result of both innate abilities *and* learning.

upper-echelons theory A conceptual framework that views organizational outcomes—strategic choices and performance levels—as reflections of the values of the members of the top management team.

In the bestseller *Good to Great*, Jim Collins explored over 1,000 *good* companies to find 11 *great* ones. He identified *great companies* as those that transitioned from average performance to sustained competitive advantage. He measured that transition as "cumulative stock returns of almost seven times the general market in the 15 years following their transition points."[34] A lot has happened since the book was published over a decade ago. Today only a few of the original 11 stayed all that great, specifically Kimberly-Clark and Walgreens. Some fell back to mediocrity; a few no longer exist in their earlier form or at all. Anyone remember Circuit City or Fannie Mae? Let's agree that competitive advantage is hard to achieve and even harder to sustain. But the book remains valuable for its thought-provoking observations. Studying these large corporations, Collins found consistent patterns of leadership among the top companies, as pictured in the **Level-5 leadership pyramid** in Exhibit 2.4.[35] The pyramid is a conceptual framework that shows leadership progression through five distinct, sequential levels. Collins found that all the companies he identified as *great* were led by Level-5 executives. So if you are interested in becoming an ethical and strategic leader, the leadership pyramid suggests the areas of growth required.

Level-5 leadership pyramid A conceptual framework of leadership progression with five distinct, sequential levels.

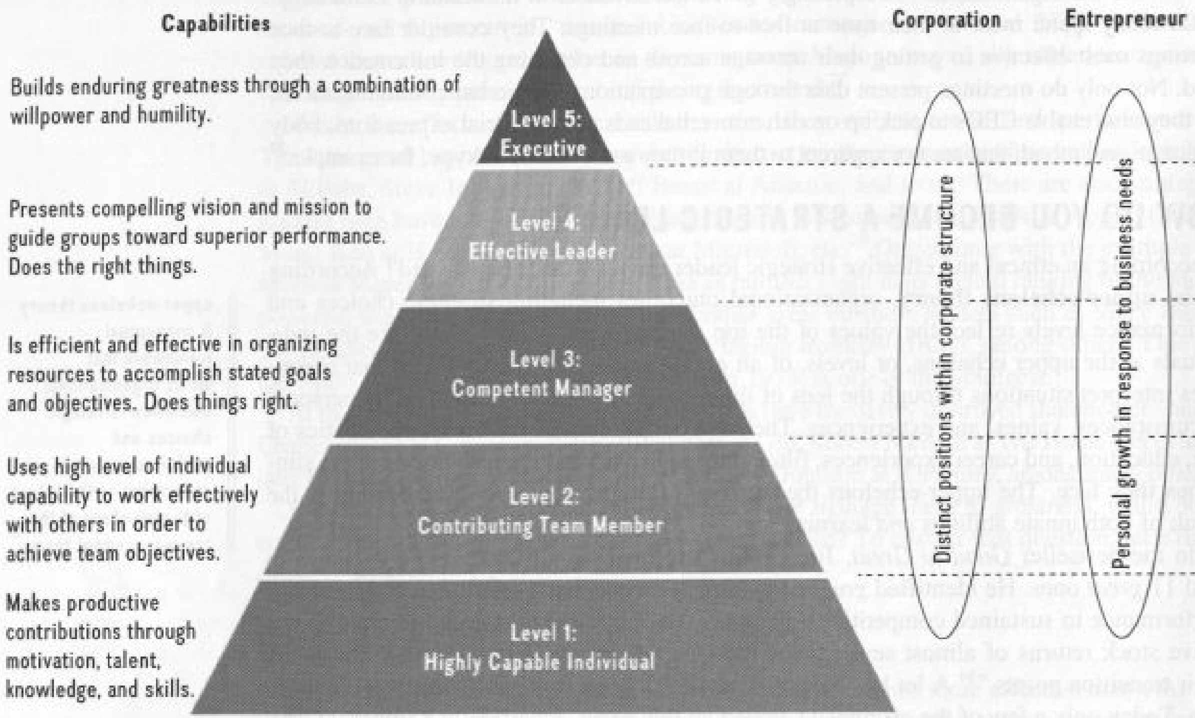
According to the Level-5 leadership pyramid, effective strategic leaders go through a natural progression of five levels. Each level builds upon the previous one; the manager can move on to the next level of leadership only when the current level has been mastered. On the left (in Exhibit 2.4) are the capabilities associated with each level. But not all companies are Fortune 500 behemoths. On the right we suggest that the model is valuable as well to the individual looking to develop the capacity for greater success.

FORMULATING STRATEGY ACROSS LEVELS: CORPORATE, BUSINESS, AND FUNCTIONAL MANAGERS

LO 2-5 Describe the roles of corporate, business, and functional managers in strategy formulation and implementation.

According to the upper-echelons theory, the top management team primarily determines a firm's ability to gain and sustain a competitive advantage through the strategies they pursue. Given the importance of such strategies, we need to gain a deeper understanding of how they are formed.

EXHIBIT 2.4 / Strategic Leaders: The Level-5 Pyramid
Adapted to compare corporations and entrepreneurs



Source: Adapted from J. Collins (2001), *Good to Great: Why Some Companies Make the Leap . . . And Others Don't* (New York: HarperCollins), 20.

strategy formulation
The part of the strategic management process that concerns the choice of strategy in terms of where and how to compete.

strategy implementation
The part of the strategic management process that concerns the organization, coordination, and integration of how work gets done, or strategy execution.

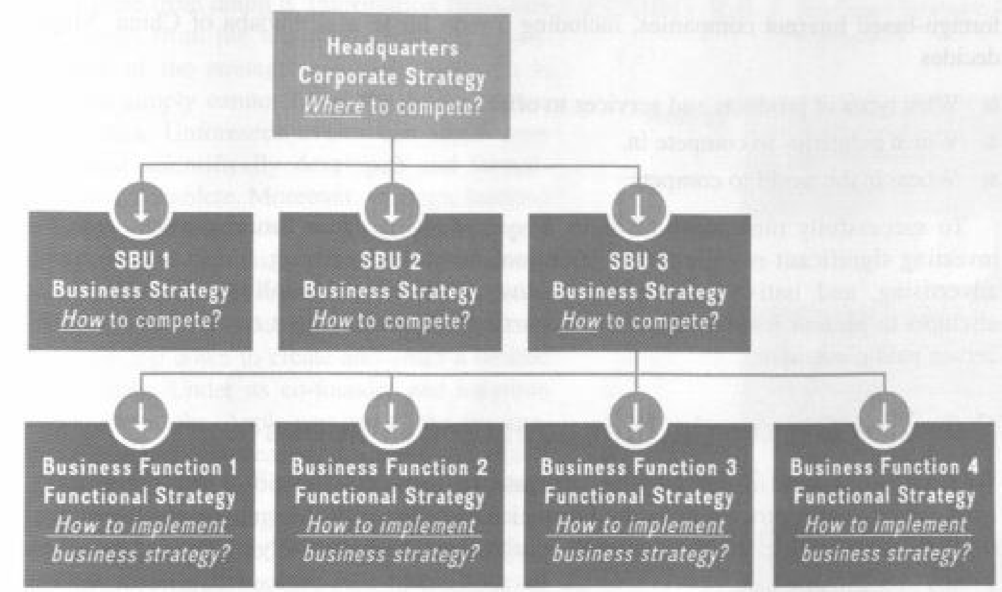
Strategy formulation concerns the choice of strategy in terms of *where and how to compete.* In contrast, **strategy implementation** concerns the organization, coordination, and integration of *how work gets done.* In short, it concerns the *execution of strategy.* It is helpful to break down strategy formulation and implementation into three distinct areas—corporate, business, and functional.

- *Corporate strategy* concerns questions relating to where to compete in terms of industry, markets, and geography.
- *Business strategy* concerns the question of how to compete. Three generic business strategies are available: cost leadership, differentiation, or value innovation.
- *Functional strategy* concerns the question of how to implement a chosen business strategy.

Exhibit 2.5 shows the three areas of strategy formulation.

Although we generally speak of the firm in an abstract form, individual employees make strategic decisions—whether at the corporate, business, or functional level. *Corporate executives* at headquarters formulate corporate strategy. Think of corporate executives including Mukesh Ambani (Reliance Industries), Ursula Burns (Xerox), Sheryl Sandberg (Facebook), or Marillyn Hewson (Lockheed Martin). Corporate executives need to decide in which industries, markets, and geographies their companies should compete. They need to formulate a strategy that can create synergies across business units that may be quite different, and determine the boundaries of the firm by deciding whether to enter certain industries and markets and whether to sell certain divisions. They are responsible for setting

EXHIBIT 2.5 /
Strategic Formulation and Implementation across Levels: Corporate, Business, and Functional Strategy

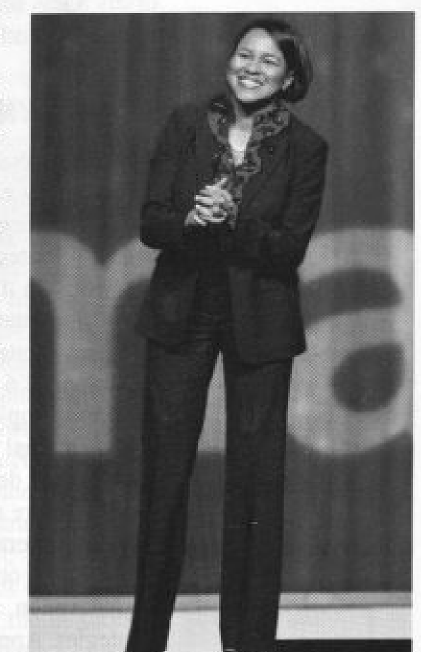


overarching strategic objectives and allocating scarce resources among different business divisions, monitoring performance, and making adjustments to the overall portfolio of businesses as needed. The objective of corporate-level strategy is to increase overall corporate value so that it is higher than the sum of the individual business units.

strategic business unit (SBU)
A standalone division of a larger conglomerate, with its own profit-and-loss responsibility.

Business strategy occurs within **strategic business units**, or **SBUs**, the standalone divisions of a larger conglomerate, each with its own profit-and-loss responsibility. General managers in SBUs must answer business strategy questions relating to how to compete in order to achieve superior performance. Within the guidelines received from corporate headquarters, they formulate an appropriate generic business strategy, including cost leadership, differentiation, or value innovation, in their quest for competitive advantage.

Rosalind Brewer, CEO of Sam's Club, pursues a somewhat different business strategy from the strategy of parent company Walmart. By offering higher-quality products and brand names with bulk offerings and by prescreening customers via required Sam's Club memberships to establish creditworthiness, Brewer is able to achieve annual revenues of roughly $60 billion. This would place Sam's Club in the top 50 in the Fortune 500 list. Although as CEO of Sam's Club, Brewer is responsible for the performance of this strategic business unit, she reports to Walmart's CEO, C. Douglas McMillon, who as corporate executive oversees Walmart's entire operations, with close to $500 billion in annual revenues and over 11,000 stores globally.



Rosalind Brewer, Sam's Club CEO
© AP Photo/April L. Brown

Within each strategic business unit are various business *functions:* accounting, finance, human resources, product development, operations, manufacturing, marketing, and customer service. Each *functional manager* is responsible for decisions and actions within a single functional area. These decisions aid in the implementation of the business-level strategy, made at the level above.

Returning to our ChapterCase, CEO Marissa Mayer determines Yahoo's corporate strategy and is responsible for the performance of the entire organization. The far-flung Yahoo has its own wide range of Internet services and products, and it owns parts of several foreign-based Internet companies, including Yahoo Japan and Alibaba of China. Mayer decides

- What types of products and services to offer.
- Which industries to compete in.
- Where in the world to compete.

To successfully turn around Yahoo, Mayer identified four future growth areas for investing significant resources and attention: mobile advertising, video, social media advertising, and native advertising. *Native advertising* is online advertising that attempts to present itself as naturally occurring editorial content rather than a search-driven paid placement.

LO 2-6

Evaluate top-down strategic planning, scenario planning, and strategy as planned emergence.

2.3 The Strategic Management Process

We have gained some insight into the corporate, business, and functional levels of strategy. Next, we turn to the process or method by which strategic leaders formulate and implement strategy. When strategizing for competitive advantage, managers rely on three approaches:

1. Strategic planning.
2. Scenario planning.
3. Strategy as planned emergence.

This order also reflects how these approaches were developed: strategic planning, then scenario planning, and then strategy as planned emergence. The first two are relatively formal, top-down planning approaches. The third approach begins with a strategic plan but offers a less formal and less stylized approach. Each approach has its strengths and weaknesses, depending on the circumstances under which it is employed.

TOP-DOWN STRATEGIC PLANNING

The prosperous decades after World War II resulted in tremendous growth of corporations. As company executives needed a way to manage ever more complex firms more effectively, they began to use strategic planning.[36] **Top-down strategic planning**, derived from military strategy, is a rational process through which executives attempt to program future success.[37] In this approach, all strategic intelligence and decision-making responsibilities are concentrated in the office of the CEO. The CEO, much like a military general, leads the company strategically through competitive battles.

top-down strategic planning
A rational, data-driven strategy process through which top management attempts to program future success.

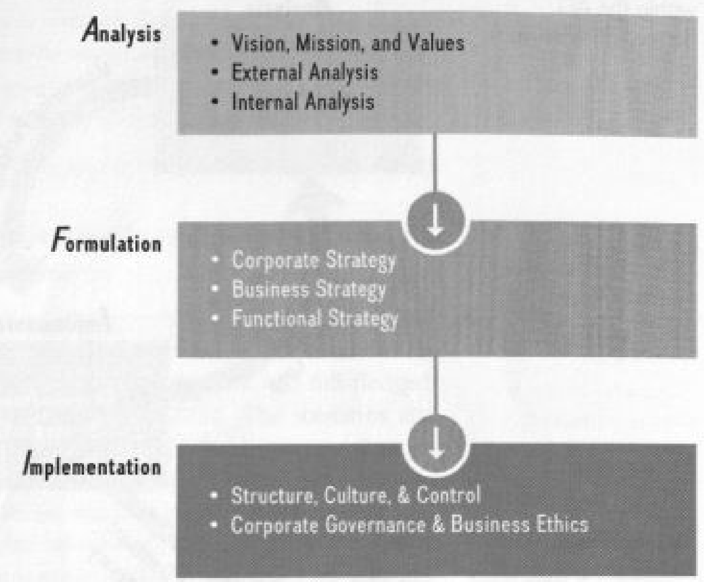
Exhibit 2.6 shows the three steps of analysis, formulation, and implementation in a traditional top-down strategic planning process. Strategic planners provide detailed analyses of internal and external data and apply it to all quantifiable areas: prices, costs, margins, market demand, head count, and production runs. Five-year plans, revisited regularly, predict future sales based on anticipated growth. Top executives tie the allocation of the annual corporate budget to the strategic plan and monitor ongoing performance accordingly. Based on a careful analysis of these data, top managers reconfirm or adjust the company's vision, mission, and values before formulating corporate, business, and functional strategies. Appropriate organizational structures and controls as well as governance mechanisms aid in effective implementation.

Top-down strategic planning more often rests on the assumption that we can predict the future from the past. The approach works reasonably well when the environment does not change much. One major shortcoming of the top-down strategic planning approach is that the formulation of strategy is separate from implementation, and thinking about strategy

is separate from doing it. Information flows one way only: from the top down. Another shortcoming of the strategic planning approach is that we simply cannot know the future. There is no data. Unforeseen events can make even the most scientifically developed and formalized plans obsolete. Moreover, strategic leaders' visions of the future can be downright wrong; a few notable exceptions prove the rule, however.

At times, strategic leaders impose their visions onto a company's strategy, structure, and culture from the top down to create and enact a desired future state. Under its co-founder and longtime CEO, Steve Jobs, Apple was one of the few successful tech companies using a top-down strategic planning process.[38] Jobs felt that he knew best what the next big thing should be. Under his top-down, autocratic leadership, Apple did not engage in market research, because Jobs firmly believed that "people don't know what they want until you show it to them."[39] This traditional top-down strategy process served Apple well as it became the world's most valuable company. Since Jobs' death, however, Apple's strategy process has become more flexible under CEO Tim Cook, and the company is now trying to incorporate the possibilities of different future scenarios and bottom-up strategic initiatives.[40]

EXHIBIT 2.6 / Top-Down Strategic Planning in the AFI Framework



SCENARIO PLANNING

Given that the only constant is change, should managers even try to strategically plan for the future? The answer is yes—but they also need to expect that unpredictable events will happen. We can compare strategic planning in a fast-changing environment to a fire department operation.[41] There is no way to know where and when the next emergency will arise, nor can we know its magnitude beforehand. Nonetheless, fire chiefs put contingency plans in place to address a wide range of emergencies along different dimensions.

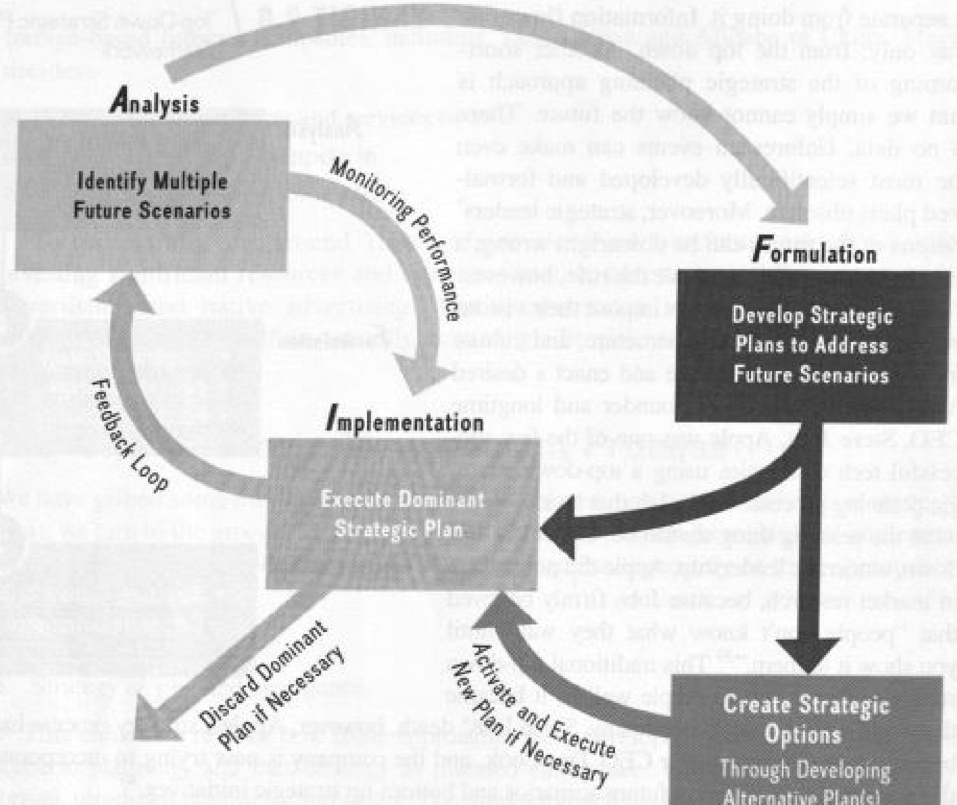
In the same way, **scenario planning** asks those "what if" questions. Similar to top-down strategic planning, scenario planning also starts with a top-down approach to the strategy process. In addition, in scenario planning, top management envisions different scenarios, to anticipate plausible futures in order to derive strategic responses. For example, new laws might restrict carbon emissions or expand employee health care. Demographic shifts may alter the ethnic diversity of a nation; changing tastes or economic conditions will affect consumer behavior. Technological advance may provide completely new products, processes, and services. How would any of these changes affect a firm, and how should it respond? Scenario planning takes place at both the corporate and business levels of strategy.

scenario planning
Strategy-planning activity in which top management envisions different what-if scenarios to anticipate plausible futures in order to derive strategic responses.

Typical scenario planning addresses both optimistic and pessimistic futures. For instance, strategy executives at UPS recently identified a number of issues as critical to shaping its future competitive scenarios: (1) big data analytics; (2) being the target of a terrorist attack, or having a security breach or IT system disruption; (3) large swings in energy prices, including gasoline, diesel and jet fuel, and interruptions in supplies of these commodities; (4) fluctuations in exchange rates or interest rates; and (5) climate change.[42] Managers then formulate strategic plans they could activate and implement should the envisioned optimistic or pessimistic scenarios begin to appear.

EXHIBIT 2.7 /

Scenario Planning within the AFI Strategy Framework



To model the scenario-planning approach, place the elements in the AFI strategy framework in a continuous feedback loop, where Analysis leads to Formulation to Implementation and back to Analysis. Exhibit 2.7 elaborates on this simple feedback loop to show the dynamic and iterative method of scenario planning.

The goal is to create a number of detailed and executable strategic plans. This allows the strategic management process to be more flexible and more effective than the more static strategic-planning approach with one master plan. In the *analysis stage,* managers brainstorm to identify possible future scenarios. Input from several different hierarchies within the organization and from different functional areas such as R&D, manufacturing, and marketing and sales is critical. UPS executives considered, for example, how they would compete if the price of a barrel of oil was $35, or $100, or even $200. Managers may also attach probabilities (highly likely versus unlikely, or 85 percent likely versus 2 percent likely) to different future states.

Although managers often tend to overlook pessimistic future scenarios, it is imperative to consider negative scenarios carefully. An exporter such as Boeing, Harley-Davidson, or John Deere would want to analyze the impact of shifts in exchange rates on profit margins. They go through an exercise to derive different strategic plans based on large exchange rate fluctuations of the U.S. dollar against major foreign currencies such as the euro, Japanese yen, or Chinese yuan. What if the euro depreciated to below $1 per euro, or the Chinese yuan depreciated rather than appreciated? How would Disney compete if the dollar were to appreciate so much as to make visits by foreign tourists to its California and Florida theme parks prohibitively expensive? Managers might also consider how black swan events (discussed in Chapter 1) might affect their strategic planning. The BP oil spill was such a black swan for many businesses on the Gulf Coast, including the tourism, fishing, and energy industries.

In the *formulation stage* in scenario planning, management teams develop different strategic plans to address possible future scenarios. This kind of what-if exercise forces managers to develop detailed contingency plans before events occur. Each plan relies on an entire set of analytical tools, which we will introduce in upcoming chapters. They capture the firm's internal and external environments and answer several key questions:

- What resources and capabilities do we need to compete successfully in each future scenario?
- What strategic initiatives should we put in place to respond to each respective scenario?
- How can we shape our expected future environment?

By formulating responses to the varying scenarios, managers build a portfolio of future options. They then continue to integrate additional information over time, which in turn influences future decisions. Finally, managers transform the most viable options into full-fledged, detailed strategic plans that can be activated and executed as needed. The scenarios and planned responses promote strategic flexibility for the organization. This is because if a new scenario should emerge, the company won't lose any time coming up with a new strategic plan. It can activate a new plan quickly based on careful scenario analysis done earlier.

In the *implementation stage,* managers execute the **dominant strategic plan**, the option that top managers decide most closely matches the current reality. If the situation changes, managers can quickly retrieve and implement any of the alternate plans developed in the formulation stage. The firm's subsequent performance in the marketplace gives managers real-time feedback about the effectiveness of the dominant strategic plan. If performance feedback is positive, managers continue to pursue the dominant strategic plan, fine-tuning it in the process. If performance feedback is negative, or if reality changes, managers consider whether to modify further the dominant strategic plan in order to enhance firm performance or to activate an alternative strategic plan.

dominant strategic plan The strategic option that top managers decide most closely matches the current reality and which is then executed.

The circular nature of the scenario-planning model in Exhibit 2.7 highlights the continuous interaction among analysis, formulation, and implementation. Through this interactive process, managers can adjust and modify their actions as new realities emerge. The interdependence among analysis, formulation, and implementation also enhances organizational learning and flexibility.

STRATEGY AS PLANNED EMERGENCE: TOP-DOWN *AND* BOTTOM-UP

Critics of top-down and scenario planning argue that *strategic planning* is not the same as *strategic thinking.*[43] In fact, they argue the strategic-planning processes are often too regimented and confining. As such, they lack the flexibility needed for quick and effective response. Managers engaged in a more formalized approach to the strategy process may also fall prey to an **illusion of control**, which describes a tendency by managers to overestimate their ability to control events.[44] Hard numbers in a strategic plan can convey a false sense of security. According to critics of strategic planning, to be successful, a strategy should be based on an inspiring vision and not on hard data alone. They advise that managers should focus on all types of information sources, including soft sources that can generate new insights, such as personal experience, deep domain expertise, or the insights of front-line employees. The important work, according to this viewpoint, is to synthesize all available input from different internal and external sources into an overall strategic vision. This vision in turn should then guide the firm's strategy, as discussed earlier in this chapter.

illusion of control A tendency by people to overestimate their ability to control events.

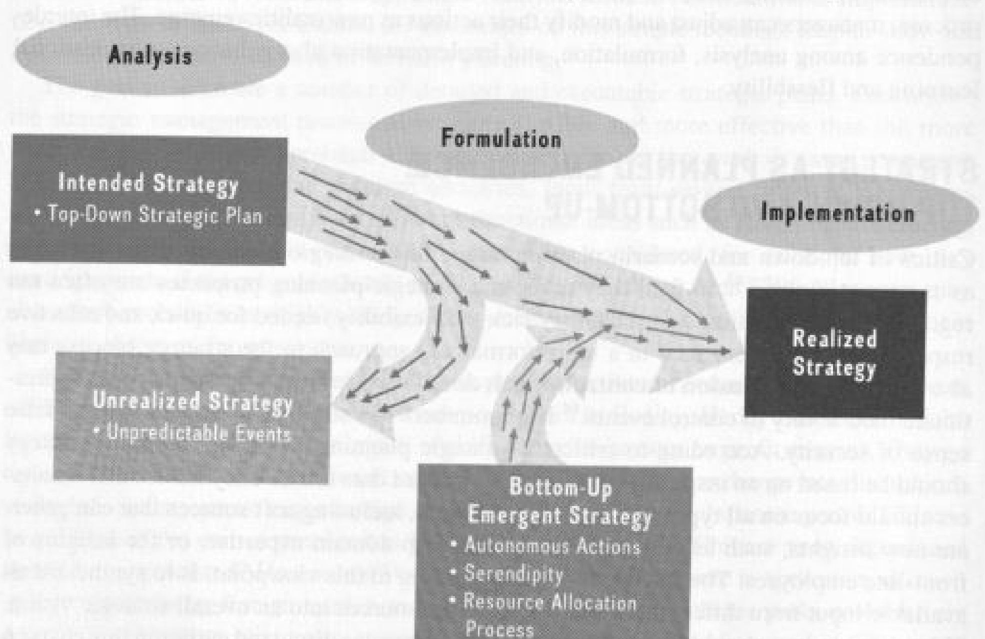
In today's complex and uncertain world, the future cannot be predicted from the past with any degree of certainty. Black swan events can profoundly disrupt businesses and society. Moreover, the other approaches to planning just discussed do not account sufficiently for the role employees at all levels of the hierarchy may play. This is because lower-level employees not only implement the given strategy, but they also frequently come up with initiatives on their own that may alter a firm's strategy. In many instances, front-line employees have unique insights based on constant customer feedback that may elude the more removed top executives. Moreover, hugely successful strategic initiatives are occasionally the result of serendipity, or unexpected but pleasant surprises.

In 1990, for example, online retailing was nonexistent. Today, almost all Internet users have purchased goods and services online. As a total of all sales, online retailing is approaching 10 percent in 2015, with an annual growth rate of almost 20 percent.[45] Given the success of Amazon as the world's leading online retailer and eBay as the largest online marketplace in the United States, brick-and-mortar companies such as Best Buy, The Home Depot, JCPenney, Kmart, Sears, and Walmart have all been forced to respond and adjust their strategy. Others such as Circuit City and RadioShack went out of business. In the business-to-business online space, Alibaba is emerging as the leading Internet-based wholesaler connecting manufacturing businesses in China to buyers in the West. In a similar fashion, Uber and Lyft, the app-based taxi hailing services, are disrupting the existing taxi and limousine businesses in many metropolitan areas across the world. Having been protected by decades of regulations, existing taxi and limo services scramble to deal with the unforeseen competition. Many try to block Uber and Lyft using the court or legislative system, alleging the app-based services violate safety and other regulations.

The critics of more formalized approaches to strategic planning, most notably Henry Mintzberg, propose a third approach to the strategic management process. In contrast to the two top-down approaches discussed above, this one is a less formal and less stylized approach to the development of strategy. To reflect the reality that strategy can be planned *or* emerge from the bottom up, Exhibit 2.8 shows a more integrative approach to managing the strategy process. Please note that even in strategy as planned emergence, the overall strategy process still unfolds along the AFI framework of analysis, formulation, and implementation.

EXHIBIT 2.8 /

Realized Strategy Is a Combination of Top-Down Intended Strategy and Bottom-Up Emergent Strategy



According to this more holistic model, the strategy process also begins with a top-down strategic plan based on analysis of external and internal environments. This analysis completes the first stage of the AFI framework (see Exhibit 2.8). Top-level executives then design an **intended strategy**—the outcome of a rational and structured, top-down strategic plan. Exhibit 2.8 illustrates how parts of a firm's *intended strategy* are likely to fall by the wayside because of unpredictable events and turn into *unrealized strategy*.

A firm's **realized strategy** is generally formulated through a combination of its top-down strategic intentions and bottom-up emergent strategy. An **emergent strategy** describes any unplanned strategic initiative bubbling up from the bottom of the organization. If successful, emergent strategies have the potential to influence and shape a firm's overall strategy.

The strategic initiative is a key feature in the strategy as a planned emergence model. A **strategic initiative** is any activity a firm pursues to explore and develop new products and processes, new markets, or new ventures. Strategic initiatives can come from anywhere. They could be the result of a response to external trends or come from internal sources. As such, strategic initiatives can be the result of top-down planning by executives, or they can also emerge through a *bottom-up process*. The arrows in Exhibit 2.8 represent different strategic initiatives. In particular, strategic initiatives can bubble up from deep within a firm through:

- Autonomous actions.
- Serendipity.
- Resource-allocation process (RAP).[46]

AUTONOMOUS ACTIONS. **Autonomous actions** are strategic initiatives undertaken by lower-level employees on their own volition and often in response to unexpected situations. Strategy Highlight 2.2 illustrates that successful emergent strategies are sometimes the result of *autonomous actions* by lower-level employees.

intended strategy The outcome of a rational and structured top-down strategic plan.

realized strategy Combination of intended and emergent strategy.

emergent strategy Any unplanned strategic initiative bubbling up from the bottom of the organization.

strategic initiative Any activity a firm pursues to explore and develop new products and processes, new markets, or new ventures.

autonomous actions Strategic initiatives undertaken by lower-level employees on their own volition and often in response to unexpected situations.

Strategy Highlight 2.2

Starbucks' CEO: "It's Not What We Do"

Diana, a Starbucks store manager in Southern California, received several requests a day for an iced beverage offered by a local competitor. After receiving more than 30 requests one day, she tried the beverage herself. Thinking it might be a good idea for Starbucks to offer a similar iced beverage, she requested that headquarters consider adding it to the product lineup. Diana had an internal champion in Howard Behar, then one of Starbucks' top executives. Behar presented this strategic initiative to the Starbucks executive committee. The committee voted down the idea in a 7:1 vote. Starbucks' CEO Howard Schultz commented, "We do coffee, we don't do iced drinks."

© Bloomberg/Getty Images

Diana, however, was undeterred. She experimented until she created the iced drink, and then she began to offer it in her store. When Behar visited Diana's store, he was shocked to see this new drink on the menu—all Starbucks stores were supposed to offer only company-approved drinks. But Diana told him the new drink was selling well.

Behar flew Diana's team to Starbucks headquarters in Seattle to serve the iced-coffee drink to the executive committee. They liked its taste, but still said no. Then Behar pulled out the sales numbers that Diana had carefully kept. The drink was selling like crazy: 40 drinks a day the first week, 50 drinks a day the next week, and then 70 drinks a day in the third week after introduction. They had never seen such growth numbers. These results persuaded the executive team to give reluctant approval to introduce the drink in all Starbucks stores.

You've probably guessed by now that we're talking about Starbucks' Frappuccino. Frappuccino is now a billion-dollar business for Starbucks. At one point, this iced drink brought in more than 20 percent of Starbucks' total revenues, which were $17 billion in 2014.[47]

Functional managers such as Diana, the Starbucks store manager featured in Strategy Highlight 2.2, are much closer to the final products, services, and customers than the more removed corporate- or business-level managers. As a result, functional managers may start strategic initiatives based on autonomous actions that can influence the direction of the company. To be successful, however, top-level executives need to support emergent strategies that they believe fit with the firm's vision and mission. Diana's autonomous actions might not have succeeded or might have got her in trouble if she did not garner the support of a senior Starbucks executive. This executive championed her initiative and helped persuade other top executives.

Although emergent strategies can arise in the most unusual circumstances, it is important to emphasize the role that top management teams play in this type of strategy process. In the strategy-as-planned-emergence approach, executives need to decide which of the bottom-up initiatives to pursue and which to shut down. This critical decision is made on the basis of whether the strategic initiative fits with the company's vision and mission, and whether it provides an opportunity worth exploiting. At General Electric, CEO Jeffrey Immelt decided to move ahead with a strategic initiative to buy the wind energy company Enron Wind from the bankruptcy proceedings of Enron, because he saw the acquisition as supporting the company's vision and mission.[48] But the initiative only survived to get Immelt's attention because of the tireless persistence of a mid-level engineer who saw its value during a transition of leadership from Jack Welch to Immelt. GE provided appropriate resources and structures to grow this emergent strategy into a major strategic initiative that's now worth billions of dollars.

serendipity
Any random events, pleasant surprises, and accidental happenstances that can have a profound impact on a firm's strategic initiatives.

SERENDIPITY. **Serendipity** describes random events, pleasant surprises, and accidental happenstances that can have a profound impact on a firm's strategic initiatives.

There are dozens of examples where serendipity had a crucial influence on the course of business and entire industries. The discovery of 3M's Post-it Notes or Pfizer's Viagra, first intended as a drug to treat hypertension, are well known.[49] Less well known is the discovery of potato chips.[50] The story goes that in the summer of 1853, George Crum was working as a cook at the Moon Lake Lodge resort in Saratoga Springs, New York. A grumpy patron ordered Moon's resort signature fried potatoes. These potatoes were served in thick slices and eaten with a fork as was in the French tradition. When the patron received the fries, he immediately returned them to the kitchen, asking for them to be cut thinner. Crum prepared a second plate in order to please the patron, but this attempt was returned as well. The third plate was prepared by an annoyed Crum who, trying to mock the patron, sliced the potatoes sidewise as thin as he could and fried them. Instead of being offended, the patron was ecstatic with the new fries and suddenly other patrons wanted to try them as well. Crum later opened his own restaurant and offered the famous "Saratoga Chips," which he set up in a box and some clients simply took home. Today, PepsiCo's line of Frito-Lay's chips are a multibillion-dollar business.

resource-allocation process (RAP)
The way a firm allocates its resources based on a predetermined policies, which can be critical in shaping its realized strategy.

RESOURCE-ALLOCATION PROCESS. A firm's **resource-allocation process (RAP)** determines the way it allocates its resources and can be critical in shaping its realized strategy.[51] Emergent strategies can result from a firm's resource-allocation process (RAP).[52] Intel Corp. illustrates this concept.[53] Intel was founded in 1968 to produce DRAM (dynamic random-access memory) chips. From the start, producing these chips was the firm's top-down strategic plan, and initially it worked well. In the 1980s, Japanese competitors brought better-quality chips to the market at lower cost, threatening Intel's position and obsoleting its top-down strategic plan. However, Intel was able to

pursue a strategic transformation because of the way it set up its resource-allocation process. In a sense, Intel was using functional-level managers to drive business and corporate strategy in a bottom-up fashion. In particular, during this time Intel had only a few fabrication plants (called "fabs") to produce silicon-based products. It would have taken several years and billions of dollars to build additional capacity by bringing new fabs online.

With constrained capacity, Intel had implemented the production-decision rule *to maximize margin-per-wafer-start.* Each time functional managers initiated a new production run, they were to consider the profit margins for DRAM chips and for semiconductors, the "brains" of personal computers. The operations managers then could produce *whichever product* delivered the higher margin. By following this simple rule, front-line managers shifted Intel's production capacity away from the lower-margin DRAM business to the higher-margin semiconductor business. The firm's focus on semiconductors emerged from the bottom up, based on resource allocation. Indeed, by the time top management finally approved the de facto strategic switch, the company's market share in DRAM had dwindled to less than 3 percent.[54]

planned emergence
Strategy process in which organizational structure and systems allow bottom-up strategic initiatives to emerge and be evaluated and coordinated by top management.

Taken together, a firm's realized strategy is frequently a combination of top-down strategic intent and bottom-up emergent strategies, as Exhibit 2.8 shows. This type of strategy process is called **planned emergence**. In that process, organizational structure and systems allow bottom-up strategic initiatives to emerge and be evaluated and coordinated by top management.[55] These bottom-up strategic initiatives can be the result of autonomous actions, serendipity, or the resource allocation process.

2.4 ◂▸ Implications for the Strategist

Two ingredients are needed to create a powerful foundation upon which to formulate and implement a strategy in order to gain and sustain a competitive advantage: First, the firm needs an inspiring vision and mission backed up by ethical values. Customer-oriented or problem-defining vision statements are often correlated with firm success over long periods of time. This is because they allow firms strategic flexibility to change in order to meet changing customer needs and exploit external opportunities. Second, the strategic leader must put an effective strategic management process in place.

Each of the three strategy processes introduced in this chapter has its strengths and weaknesses. The effectiveness of the chosen strategy process is *contingent* upon the rate of change in the internal and external environments of the firm. In a slow-moving and stable environment, top-down strategic planning might be the most effective approach. Besides the rate of change, a second dimension is firm size. Larger firms tend to use either a top-down strategic-planning process or scenario planning. For a nuclear power provider such as Areva in France that provides over 75 percent of the country's energy and has the long-term backing of the state, for instance, using a top-down strategy approach might work well. Given that nuclear accidents are rare, but when they occur they have a tremendous impact such as in Chernobyl, Russia, and Fukushima, Japan, Areva might use scenario planning to prepare for black swan events. In fast-moving environments, in contrast, Internet-based companies such as Alibaba, Facebook, Google, Dropbox, Pinterest, Twitter, or Uber tend to use the strategy-as-planned-emergence process.

Another important implication of our discussion is that all employees should be involved in setting an inspiring vision and mission to create more meaningful work. Belief in a company's vision and mission motivates its employees. Moreover, every employee plays a strategic role. Lower-level employees focus mainly on strategy implementation when a firm is using top-down or scenario planning. As the examples have shown, however, *any* *employee*, even at the entry level, can have great ideas that might become *strategic initiatives* with the potential to transform companies. Exhibit 2.9 compares and contrasts the three different approaches to the strategic management process: top-down strategic planning, scenario planning, and strategy as planned emergence.

Here we conclude our discussion of the strategic management process, which marks the end of the "getting started" portion of the AFI framework. The next three chapters cover the analysis part of the framework, where we begin by studying external and internal analyses before taking a closer look at competitive advantage, firm performance, and business models.

EXHIBIT 2.9 / Comparing and Contrasting Top-Down Strategic Planning, Scenario Planning, and Strategy as Planned Emergence

Strategy Process	Description	Pros	Cons	Where Best Used
Top-Down Strategic Planning	A rational strategy process through which top management attempts to program future success; typically concentrates strategic intelligence and decision-making responsibilities in the office of the CEO.	• Provides a clear strategy process and lines of communication. • Affords coordination and control of various business activities. • Readily accepted and understood as process is well established and widely used. • Works relatively well in stable environments.	• Fairly rigid and inhibits flexibility. • Top-down, one-way communication limits feedback. • Assumes that the future can usually be predicted based on past data. • Separates elements of AFI framework so that top management (analysis & formulation) are removed from line employees (implementation).	• Highly regulated and stable industries such as utilities, e.g., Georgia Power in Southeast United States or Areva, state-owned nuclear operator in France. • Government • Military
Scenario Planning	Strategy-planning activity in which top management envisions different what-if scenarios to anticipate plausible futures in order to plan optimal strategic responses.	• Provides a clear strategy process and lines of communication. • Affords coordination and control of various business activities. • Readily accepted and understood as process is well established and widely used. • Provides some strategic flexibility.	• Top-down, one-way communication limits feedback. • Separates elements of AFI framework so that top management (analysis & formulation) are removed from line employees (implementation). • As the future is unknown, responses to all possible events cannot be planned. • Leaders tend to avoid planning for pessimistic scenarios.	• Fairly stable industries, often characterized by some degree of regulation such as airlines, logistics, or medical devices, e.g., American Airlines, Delta Air Lines and United Airlines; FedEx and UPS; Medtronic. • Larger firms in industries with a small number of other large competitors (oligopoly).
Strategy as Planned Emergence	Blended strategy process in which organizational structure and systems allow both top-down vision and bottom-up strategic initiatives to emerge for evaluation and coordination by top management.	• Combines all elements of the AFI framework in a holistic and flexible fashion. • Provides provisional direction through intended strategy. • Accounts for unrealized strategy (not all strategic initiatives can be implemented). • Accounts for emergent strategy (good ideas for strategic initiatives can bubble up from lower levels of hierarchy through autonomous actions, serendipity, and RAP). • The firm's realized strategy is a combination of intended and emergent strategy. • Highest degree of strategic flexibility and buy-in by employees.	• Unclear strategy process and lines of communication can lead to employee confusion and lack of focus. • Many ideas that bubble up from the bottom may not be worth pursuing. • Firms may lack a clear process of how to evaluate emergent strategy, increasing the chances of missing mega opportunities or pursuing dead ends; may also contribute to employee frustration and lower morale.	• New ventures and smaller firms. • High-velocity industries such as technology ventures. • Internet companies (e.g., Alibaba, Amazon, Baidu, Facebook, eBay, Google, Salesforce.com, Twitter, Uber, and Yahoo. • Biotech companies (e.g., Amgen, Biogen, Gilead Sciences, Genentech, and Genzyme).

CHAPTERCASE 2 / Consider This . . .

LET'S TAKE ONE more look at Yahoo. Once a leader in online advertising in the Web 1.0 portal world, Yahoo had fallen to third place, behind Google and Facebook, well before its current CEO took charge. As CEO, Marissa Mayer wants Yahoo to "own" (be the market leader in) the mobile Internet in creating the best user experience, just as Yahoo once owned the user experience in the early days of the Internet for desktop users.

But much has changed. In the early days, the Internet was hard to use. Yahoo provided a web portal that solved this problem for millions of users worldwide. It was their first stop once they logged in. With successful Yahoo products like Yahoo Mail, Yahoo Finance, and Yahoo Sports, many users spent their entire time online at Yahoo. In the first decade of the Internet, this made Yahoo extremely attractive for online advertisers.

By 2012, however, the Internet had undergone a dramatic shift from the Web 1.0 on personal computers to a Web 2.0 on mobile devices. The mobile experience, and with it mobile advertising, had become the new frontier.

The difficulty that Mayer encountered as the new Yahoo CEO was that Google, Facebook, and Twitter all had moved faster and more successfully into the mobile space and thus mobile advertising.

To generate much-needed cash for the turnaround and to keep investors happy, Mayer sold part of Yahoo's ownership in Alibaba Group, when the Chinese Internet company went public in the fall of 2014. In 2015, Mayer announced that Yahoo would spin out the remaining 15 percent ownership of Alibaba, valued at close to $40 billion out of the roughly $45 billion market value for Yahoo.[56] With this strategic move, Mayer may be trying to buy herself even more time to turn Yahoo around. Unfortunately, Yahoo continues to decline in its core advertising business. Some of the money will be returned to shareholders, some will be used to buy more companies to strengthen Yahoo's technical capabilities and engineering skills, especially in the four key areas of focus: mobile, video, social media, and native advertising.

Perhaps the thorniest problem that Mayer faces is that investors still don't see much value in Yahoo's core business. Given Yahoo's $45 billion market capitalization, some analysts argue that Yahoo's holdings in Alibaba and in Yahoo Japan account for *all* of the value in Yahoo, if not more. They say if you subtract the value of Yahoo's remaining equity holdings from its market cap, the true valuation of Yahoo's core business is zero or less than zero. And financial results on Yahoo's core business continues to decline.

Questions

1. In an attempt to turn around Yahoo, Mayer defined a new vision and mission for the Internet company. How useful are the new vision and mission in Yahoo's turnaround attempt?
2. What are some of the major changes Mayer has undertaken to turn Yahoo around? How do you evaluate them?
3. What "grade" would you give Mayer for her job performance as strategic leader? What are her strengths and her weaknesses? Where would you place her on the Level-5 pyramid of strategic leaders (see Exhibit 2.4), and why? Support your answers.
4. Some investors remain skeptics about Yahoo's future, essentially valuing the company close to zero dollars were it to sell its stake in Alibaba. Do you share their pessimism, or do you think that Mayer will be able turn Yahoo around? Why or why not?

TAKE-AWAY CONCEPTS

This chapter explained the role of vision, mission, and values in the strategic management process. It provided an overview of strategic leadership and explained different processes to create strategy, as summarized by the following learning objectives and related take-away concepts.

LO 2-1 / Describe the roles of vision, mission, and values in the strategic management process.

- A vision captures an organization's aspirations. An effective vision inspires and motivates members of the organization.
- A mission statement describes what an organization actually does—what its business is—and why and how it does it.
- Core values define the ethical standards and norms that should govern the behavior of individuals within the firm.

LO 2-2 / Evaluate the strategic implications of product-oriented and customer-oriented vision statements.

- Product-oriented vision statements define a business in terms of a good or service provided.
- Customer-oriented vision statements define business in terms of providing solutions to customer needs.
- Customer-oriented vision statements provide managers with more strategic flexibility than product-oriented missions.
- To be effective, visions and missions need to be backed up by hard-to-reverse strategic commitments and tied to economic fundamentals.

LO 2-3 / Explain why anchoring a firm in ethical core values is essential for long-term success.

- Ethical core values form a solid foundation on which a firm can build its vision and mission, and thus lay the groundwork for long-term success.

- Ethical core values are the guardrails that help keep the company on track when pursuing its mission and its quest for competitive advantage.

LO 2-4 / Outline how managers become strategic leaders.

- To become an effective strategic leader, a manager needs to develop skills to move sequentially through five different leadership levels: highly capable individual, contributing team member, competent manager, effective leader, and executive.
- The Level-5 strategic leadership pyramid applies to both distinct corporate positions and personal growth.

LO 2-5 / Describe the roles of corporate, business, and functional managers in strategy formulation and implementation.

- Corporate executives must provide answers to the question of *where to compete,* whether in industries, markets, or geographies, and *how to create synergies* among different business units.
- General managers in strategic business units must answer the strategic question of *how to compete* in order to achieve superior performance. They must manage and align the firm's different functional areas for competitive advantage.
- Functional managers are responsible for *implementing business strategy* within a single functional area.

LO 2-6 / Evaluate top-down strategic planning, scenario planning, and strategy as planned emergence.

- Top-down strategic planning is a sequential, linear process that works reasonably well when the environment does not change much.
- In scenario planning, managers envision what-if scenarios and prepare contingency plans that can be called upon when necessary.
- Strategic initiatives can be the result of top-down planning or can emerge through a bottom-up process from deep within the organization. They have the potential to shape a firm's strategy.
- A firm's realized strategy is generally a combination of its top-down intended strategy and bottom-up emergent strategy, resulting in planned emergence.

KEY TERMS

Autonomous actions *(p. 51)*
Core values statement *(p. 36)*
Dominant strategic plan *(p. 49)*
Emergent strategy *(p. 51)*
Illusion of control *(p. 49)*
Intended strategy *(p. 51)*
Level-5 leadership pyramid *(p. 43)*
Mission *(p. 36)*
Organizational core values *(p. 40)*
Planned emergence *(p. 53)*
Realized strategy *(p. 51)*
Resource-allocation process (RAP) *(p. 52)*
Scenario planning *(p. 47)*
Serendipity *(p. 52)*
Strategic business unit (SBU) *(p. 45)*
Strategic commitments *(p. 36)*
Strategy formulation *(p. 44)*
Strategy implementation *(p. 44)*
Strategic initiative *(p. 51)*
Strategic leadership *(p. 34)*
Strategic management process *(p. 34)*
Top-down strategic planning *(p. 46)*
Upper-echelons theory *(p. 43)*
Vision *(p.35)*

DISCUSSION QUESTIONS

1. What characteristics does an effective mission statement have?
2. In what situations is top-down planning likely to be superior to bottom-up emergent strategy development?
3. This chapter introduces three different levels appropriate for strategic considerations (see Exhibit 2.5). In what situations would some of these levels be more important than others? For example, what issues might be considered

Chapter 3

External Analysis: Industry Structure, Competitive Forces, and Strategic Groups

Chapter Outline

Learning Objectives

LO 3-1 Generate a PESTEL analysis to evaluate the impact of external factors on the firm.

LO 3-2 Apply Porter's five competitive forces to explain the profit potential of different industries.

LO 3-3 Explain how competitive industry structure shapes rivalry among competitors.

LO 3-4 Describe the strategic role of complements in creating positive-sum co-opetition.

LO 3-5 Appraise the role of industry dynamics and industry convergence in shaping the firm's external environment.

LO 3-6 Generate a strategic group model to reveal performance differences between clusters of firms in the same industry.

CHAPTERCASE 3

Tesla Motors and the U.S. Automotive Industry

THE BIG THREE—GM, Ford, and Chrysler—ruled the U.S. car market for most of the 20th century. Protected by high entry barriers, highly profitable GM had over half of the U.S. market to itself. Ford and Chrysler both did well too. Then, in the 1960s and 1970s, foreign carmakers entered the U.S. market, at first mainly by importing vehicles from overseas plants. Foreign makes included the German brands Volkswagen (also owner of the Porsche and Audi brands), Daimler, and BMW, and the Japanese brands Toyota, Honda, and Nissan. By the 1980s, these foreign entrants had intensified competition and threatened the Big Three's market share, such that the U.S. Congress passed significant import restrictions. Not to be stopped, the new players responded by building U.S. plants to comply with the new rules. More recently, Korean carmakers Hyundai and Kia have begun making and selling cars in the United States.

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Although globalization paved the way for significant new entry into the U.S. auto market, the worldwide car manufacturing industry has seen few new entrants. In fact, no new major car manufacturers have emerged in the past couple of decades simply because few industrial products, save for jet airplanes and nuclear power plants, are as complex to build as traditional cars powered by internal combustion engines. Large-scale production is necessary for car manufacturers to be cost-competitive. Taken together, these factors create significant entry barriers into the car manufacturing industry. Would you say, then, that a Silicon Valley technology startup, attempting to break into this industry, might be running a fool's errand?

Enter serial entrepreneur Elon Musk, who creates and runs new ventures to address not only economic but also social and environmental challenges. Musk looms large in the public imagination and has even been likened to the fictional Tony Stark, aka the Iron Man, Marvel Comics' eccentric inventor. Indeed, Musk made a cameo appearance in *Iron Man 2.* During the Internet boom, Musk made his fortune by developing an early version of Google maps and by co-founding the online payment system PayPal. The sale of both companies amounted to close to $2 billion, and Musk's share allowed him to focus on his lifelong passions in science, engineering, and space.

His most recent companies include SpaceX, the first private company to deliver a cargo payload to the International Space Station; SolarCity, basically the Walmart of solar panel installations; and, of course, Tesla Motors. Currently, Tesla receives most of Musk's attention.

Faced with the formidable entry barrier of large-scale production, Tesla sidesteps the hurdle by producing all-electric cars. Compared to complex gasoline engines, electric power trains use relatively simple motors and gearboxes with few parts. The Tesla Roadster, a $110,000 sports coupe with faster acceleration than a Porsche 911 GT, served as a prototype to demonstrate that electric vehicles can be more than mere golf carts.

After selling some 2,500 Roadsters, Tesla discontinued its production to focus on its next car: the Model S, a four-door family sedan, with a base price of $71,000 before tax credits. The line appeals to a larger market and thus allows for larger production runs to drive down unit costs. The Model S received an outstanding market reception. It was awarded not only the 2013 *Motor Trend* Car of the Year, but also received the highest score of any car ever tested by *Consumer Reports* (99/100). Tesla manufactures the Model S in the Fremont, California, factory that it purchased from Toyota. By 2015, it had sold some 60,000 of the Model S worldwide. Tesla is also working on a newly designed seven-seat electric vehicle—the Model X—in an attempt to combine the best features of an SUV with the benefits of a minivan; the first deliveries are scheduled for 2016. The third model in Tesla's lineup is a smaller vehicle that will cost around $35,000 and has a range of 200 miles per battery charge. The Model 3 is slated to go on sale in 2017.[1]

You will learn more about Tesla Motors by reading this chapter; related questions appear on page 95.

THE TESLA MOTORS ChapterCase illustrates that competitive forces in an industry have a direct bearing on a firm's profit potential. Globalization led to extensive entry by foreign car manufacturers in the U.S. auto market, increasing the number of competitors and competitive rivalry. The Japanese automakers, for example, were successful in the U.S. market early on because their cars were generally of better quality, their production systems were more efficient, and they were more responsive to changes in customer preferences. Today, Korean carmakers are attempting to duplicate this feat. At the same time, U.S. automakers Ford and GM are experiencing a resurgence. Moreover, technological innovations have allowed startups such as Tesla Motors to enter the electric car segment (or strategic group), effectively circumventing high entry barriers into the broader automotive market. With more firms vying for a share of the U.S. auto market, competitive intensity is likely to increase.

In this chapter, we present a set of frameworks to analyze the firm's *external environment*—that is, the industry in which the firm operates, and the competitive forces that surround the firm from the outside. We move from a more macro perspective to a more micro understanding of how the external environment affects a firm's quest for competitive advantage.

We begin with the PESTEL framework, which allows us to scan, monitor, and evaluate changes and trends in the firm's macroenvironment. Next, we study Porter's five forces model of competition, which helps us to determine an industry's profit potential. Depending on the firm's strategic position, these forces can affect its performance for good or ill. We then move from a static analysis of a firm's industry environment to a dynamic understanding of how industries and competition change over time. Next we introduce the strategic group model for understanding performance differences among clusters of firms in the same industry. Finally, we offer practical "Implications for the Strategist."

LO 3-1

Generate a PESTEL analysis to evaluate the impact of external factors on the firm.

3.1 The PESTEL Framework

A firm's external environment consists of all the factors that can affect its potential to gain and sustain a competitive advantage. By analyzing the factors in the external environment, managers can mitigate threats and leverage opportunities. One common approach to understanding how external factors impinge upon a firm is to consider the source or proximity of these factors. For example, external factors in the firm's *general environment* are ones that managers have little direct influence over, such as macroeconomic factors (e.g., interest or currency exchange rates). In contrast, external factors in the firm's *task environment* are ones that managers do have some influence over, such as the composition of their strategic groups (a set of close rivals) or the structure of the industry. We will now look at each of these environmental layers in detail, moving from a firm's general environment to its task environment. Following along in Exhibit 3.1, we will be working from the outer ring to the inner ring.

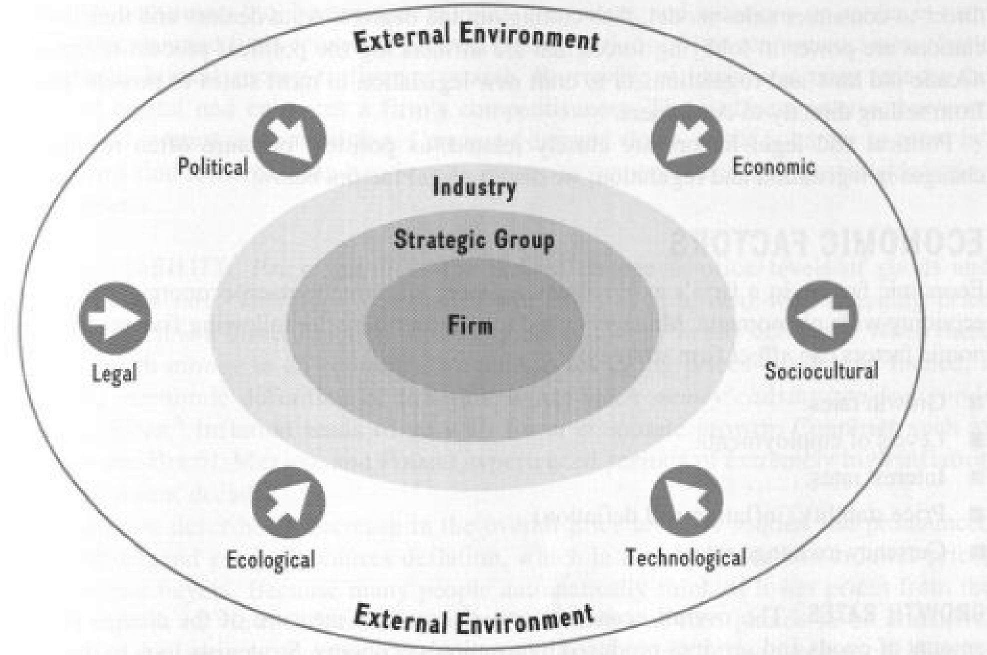


EXHIBIT 3.1 /

The Firm within Its External Environment, Industry, and Strategic Group, Subject to PESTEL Factors

The **PESTEL model** groups the factors in the firm's general environment into six segments:

- Political
- Economic
- Sociocultural
- Technological
- Ecological
- Legal

PESTEL model A framework that categorizes and analyzes an important set of external factors (political, economic, sociocultural, technological, ecological, and legal) that might impinge upon a firm. These factors can create both opportunities and threats for the firm.

Together these form the acronym PESTEL. The PESTEL model provides a relatively straightforward way to *scan, monitor,* and *evaluate* the important external factors and trends that might impinge upon a firm. With more open markets and international trade in recent decades, the PESTEL factors have become more global. Such factors create both opportunities and threats.

POLITICAL FACTORS

Political factors result from the processes and actions of government bodies that can influence the decisions and behavior of firms.[2]

While political factors are located in the firm's general environment, where firms traditionally wield little influence, companies nevertheless increasingly work to shape and influence this realm. They do so by applying *nonmarket strategies*—that is, through lobbying, public relations, contributions, litigation, and so on, in ways that are favorable to the firm.[3] For example, traditional car dealers have been challenging Tesla's build-to-order sales model that allows customers to purchase a Tesla vehicle online and have it delivered to their home, anywhere in the United States.[4] Traditional car dealers, which often benefit from geographic monopolies, are not so much concerned about Tesla Motors as they are that their own brand names, such as GM or Ford, will also adopt an online, direct-to-consumer sales model, thus cutting out the dealers. Auto dealers and their associations are powerful lobbying forces that are influencing the political process to invoke decade-old laws and regulations or to craft new legislation in most states to prevent Tesla from selling directly to consumers.

Political and legal factors are closely related, as political pressure often results in changes in legislation and regulation; we discuss legal factors below.

ECONOMIC FACTORS

Economic factors in a firm's external environment are largely macroeconomic, affecting economy-wide phenomena. Managers need to consider how the following five macroeconomic factors can affect firm strategy:

- Growth rates.
- Levels of employment.
- Interest rates.
- Price stability (inflation and deflation).
- Currency exchange rates.

GROWTH RATES. The overall economic *growth rate* is a measure of the change in the amount of goods and services produced by a nation's economy. Strategists look to the *real growth rate,* which adjusts for inflation. This real growth rate indicates the current business cycle of the economy—that is, whether business activity is expanding or contracting. In periods of economic expansion, consumer and business demands are rising, and competition among firms frequently decreases. During economic booms, businesses expand operations to satisfy demand and are more likely to be profitable. The reverse is generally true for recessionary periods, although certain companies that focus on low-cost solutions may benefit from economic contractions because demand for their products or services rises in such times. For customers, expenditures on luxury products are often the first to be cut during recessionary periods. For instance, you might switch from a $4 venti latte at Starbucks to a $1 alternative from McDonald's.

Occasionally, boom periods can overheat and lead to speculative asset bubbles. In the early 2000s, the United States experienced an asset bubble in real estate.[5] Easy credit, made possible by the availability of subprime mortgages and other financial innovations, fueled an unprecedented demand in housing. Real estate, rather than stocks, became the investment vehicle of choice for many Americans, propelled by the common belief that house prices could only go up. When the housing bubble burst, the deep economic recession of 2008–2009 began, impacting in some way nearly all businesses in the United States and worldwide.

LEVELS OF EMPLOYMENT. Growth rates directly affect the *level of employment.* In boom times, unemployment tends to be low, and skilled human capital becomes a scarce and more expensive resource. In economic downturns, unemployment rises. As more people search for employment, skilled human capital is more abundant and wages usually fall.

INTEREST RATES. Another key macroeconomic variable for managers to track is real *interest rates*—the amount that creditors are paid for use of their money and the amount that debtors pay for that use, adjusted for inflation. The economic boom during the early years in the 21st century, for example, was fueled by cheap credit. Low real interest rates have a direct bearing on consumer demand. When credit is cheap because interest rates

are low, consumers buy homes, automobiles, computers, and vacations on credit; in turn, all of this demand fuels economic growth. During periods of low real interest rates, firms can easily borrow money to finance growth. Borrowing at lower real rates reduces the cost of capital and enhances a firm's competitiveness. These effects reverse, however, when real interest rates are rising. Consumer demand slows, credit is harder to come by, and firms find it more difficult to borrow money to support operations, possibly deferring investments.

PRICE STABILITY. *Price stability*—the lack of change in price levels of goods and services—is rare. Therefore, companies will often have to deal with changing price levels, which is a direct function of the amount of money in any economy. When there is too much money in an economy, we tend to see rising prices—*inflation.* Indeed, a popular economic definition of inflation is *too much money chasing too few goods and services.*[6] Inflation tends to go with lower economic growth. Countries such as Argentina, Brazil, Mexico, and Poland experienced periods of extremely high inflation rates in recent decades.

Deflation describes a decrease in the overall price level. A sudden and pronounced drop in demand generally causes deflation, which in turn forces sellers to lower prices to motivate buyers. Because many people automatically think of lower prices from the buyer's point of view, a decreasing price level seems at first glance to be attractive. However, deflation is actually a serious threat to economic growth because it distorts expectations about the future.[7] For example, once price levels start falling, companies will not invest in new production capacity or innovation because they expect a further decline in prices. In recent decades, the Japanese economy has been plagued with persistent deflation.

CURRENCY EXCHANGE RATES. The *currency exchange rate* determines how many dollars one must pay for a unit of foreign currency. It is a critical variable for any company that buys or sells products and services across national borders. For example, if the U.S. dollar appreciates against the euro, and so increases in real value, firms need more euros to buy one dollar. This in turn makes U.S. exports such as Boeing aircraft, Intel chips, or John Deere tractors more expensive for European buyers and reduces demand for U.S. exports overall. This process reverses when the dollar depreciates (decreases in real value) against the euro. In this scenario it would take more dollars to buy one euro, and European imports such as LVMH luxury accessories or BMW automobiles become more expensive for U.S. buyers.

In a similar fashion, if the Chinese yuan appreciates in value, Chinese goods imported into the United States are relatively more expensive. At the same time, Chinese purchasing power increases, which in turn allows their businesses to purchase more U.S. capital goods such as sophisticated machinery and other cutting-edge technologies.

In summary, economic factors affecting businesses are ever-present and rarely static. Managers need to fully appreciate the power of these factors, in both domestic and global markets, to assess their effects on firm performance.

SOCIOCULTURAL FACTORS

Sociocultural factors capture a society's cultures, norms, and values. Because sociocultural factors not only are constantly in flux but also differ across groups, managers need to closely monitor such trends and consider the implications for firm strategy. In recent years, for example, a growing number of U.S. consumers have become more health-conscious about what they eat. This trend led to a boom for businesses such as Chipotle, Subway, and Whole Foods. At the same time, traditional fast-food companies McDonald's and Burger King, along with grocery chains such as Albertsons and Kroger, have all had to scramble to provide healthier choices in their product offerings.

Demographic trends are also important sociocultural factors. These trends capture population characteristics related to age, gender, family size, ethnicity, sexual orientation, religion, and socioeconomic class. Like other sociocultural factors, demographic trends present opportunities but can also pose threats. The most recent U.S. census revealed that 51 million Americans (16.4 percent of the total population) are Hispanic. It is now the second-largest ethnic group in the United States and growing fast. On average, Hispanics are also younger and their incomes are climbing quickly. This trend is not lost on companies trying to benefit from this opportunity. For example, MundoFox and ESPN Deportes (specializing in soccer) have joined Univision and NBC's Telemundo in the Spanish-language television market. In the United States, Univision is now the fifth most popular network overall, just behind the four major English-language networks (ABC, NBC, CBS, and Fox). Likewise, advertisers are pouring dollars into the Spanish-language networks to promote their products and services.[8]

TECHNOLOGICAL FACTORS

Technological factors capture the application of knowledge to create new processes and products. Major innovations in process technology include lean manufacturing, Six Sigma quality, and biotechnology. The nanotechnology revolution, which is just beginning, promises significant upheaval for a vast array of industries ranging from tiny medical devices to new-age materials for earthquake-resistant buildings.[9] Recent product innovations include the smartphone, computer tablets, and high-performing electric cars such as the Tesla Model S. Recent service innovations include social media and online search engines that respond to voice commands. If one thing seems certain, technological progress is relentless and seems to be picking up speed.[10] Not surprisingly, changes in the technological environment bring both opportunities and threats for companies. Given the importance of a firm's innovation strategy to competitive advantage, we discuss the effect of technological factors in greater detail in Chapter 7.

Strategy Highlight 3.1 details how BlackBerry fell victim by not paying sufficient attention to the PESTEL factors.

ECOLOGICAL FACTORS

Ecological factors involve broad environmental issues such as the natural environment, global warming, and sustainable economic growth. Organizations and the natural environment coexist in an interdependent relationship. Managing these relationships in a responsible and sustainable way directly influences the continued existence of human societies and the organizations we create. Managers can no longer separate the natural and the business worlds; they are inextricably linked.[11]

Negative examples come readily to mind, as many business organizations have contributed to the pollution of air, water, and land, as well as depletion of the world's natural resources. BP's infamous oil spill in the Gulf of Mexico destroyed fauna and flora along the U.S. shoreline from Texas to Florida. This disaster led to a decrease in fish and wildlife populations, triggered a decline in the fishery and tourism industries, and threatened the livelihood of thousands of people. It also cost BP some $50 billion and one-half of its market value (see Strategy Highlight 1.2).

Strategy Highlight 3.1

BlackBerry's Bust

A pioneer in smartphones, BlackBerry was the undisputed industry leader in the early 2000s. IT managers preferred BlackBerry. Its devices allowed users to receive e-mail and other data in real time globally, with enhanced security features. For executives, a BlackBerry was not just a tool to increase productivity—and to free them from their laptops—but also an important status symbol. As a consequence, by 2008 BlackBerry's market cap had peaked at $75 billion. Yet by 2015, this valuation had fallen more than 90 percent, to less than $7 billion. What happened?

Being Canadian, BlackBerry's longtime co-CEO, Jim Balsillie, not surprisingly sees ice hockey as his favorite sport. He likes to quote Wayne Gretzky, "The Great One," whom many consider the best ice hockey player ever: "Skate to where the puck is going to be, not to where it is." Alas, BlackBerry did not follow that advice. BlackBerry fell victim to two important PESTEL factors in its external environment: sociocultural and technological.

Let's start with technology. The introduction of the iPhone by Apple in 2007 changed the game in the mobile device industry. Equipped with a camera, the iPhone's slick design offered a user interface with a touchscreen including a virtual keyboard. The iPhone connected seamlessly other cellular networks and Wi-Fi. Combined with thousands of apps via the Apple iTunes store, the iPhone provided a powerful user experience, or as the late Steve Jobs said, "the Internet in your pocket."

Wayne Gretzky: Skate to where the puck is going to be, not to where it is.
© AP Photo/Jim Rogash

However, BlackBerry engineers and executives initially dismissed the iPhone as a mere toy with poor security features. Everyday users thought differently. They had less concern for encrypted software security than they had desire for having fun with a device that allowed them to text, surf the web, take pictures, play games, and do e-mail. Although BlackBerry devices were great in productivity applications, such as receiving and responding to e-mail via typing on its iconic physical keyboard, they provided a poor mobile web browsing experience.

The second external development that helped erode BlackBerry's dominance was sociocultural. Initially, mobile devices were issued top-down by corporate IT departments. The only available device for execs was a company-issued BlackBerry. This made life easy for IT departments, ensuring network security. Consumers, however, began to bring their personal iPhones to work and used them for corporate communication and productivity applications. This bottom-up groundswell of the BYOT ("bring your own technology") movement forced corporate IT departments to open up their services beyond the BlackBerry.

Caught in the oncoming gale winds of two PESTEL factors—technological and sociocultural—BlackBerry was pushed backward in the smartphone market. Unlike Gretzky, it failed to skate where the puck was going to be and therefore continued to focus on its existing customer base of corporate IT departments and government. Later, feeble modifications in product lineup appeared to be a "too little, too late." Apple continued to drive innovation in the smartphone industry by bringing out more advanced iPhone models and enhancing the usefulness of its apps for the various business and productivity applications.[12]

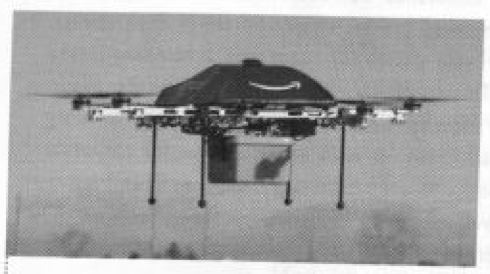
Let's think about the rapid progress in mobile computing. BlackBerry, once an undisputed leader in the smartphone industry, did not recognize early enough or act upon changes in the external environment. Consumer preferences changed quickly as the iPhone and later the iPad became available. Professionals brought their own Apple or other devices to work instead of using company-issued BlackBerrys. Although the Canadian technology company made a valiant effort to make up lost ground with its new BlackBerry 10 operating system and several new models, it was too little, too late.

The relationship between organizations and the natural environment need not be adversarial, however. Ecological factors can also provide business opportunities. As we saw in the ChapterCase, Tesla Motors is addressing environmental concerns regarding the carbon emissions of gasoline-powered cars by building zero-emission battery-powered vehicles. The question of how to generate the power needed to charge the batteries in a sustainable way, however, still needs to be addressed.

LEGAL FACTORS

Legal factors include the official outcomes of political processes as manifested in laws, mandates, regulations, and court decisions—all of which can have a direct bearing on a firm's profit potential. In fact, regulatory changes tend to affect entire industries at once. Many industries in the United States have been deregulated over the last few decades, including airlines, telecom, energy, and trucking, among others.

As noted earlier, legal factors often coexist with or result from political will. Governments especially can directly affect firm performance by exerting both political pressure and legal sanctions, including court rulings and industry regulations. Consider how several European countries and the European Union (EU) apply political and legal pressure on U.S. tech companies. European targets include Apple, Amazon, Facebook, Google, and Microsoft—the five largest U.S. tech companies—but also startups such as Uber, the taxi-hailing mobile app. Europe's policy makers seek to retain control over important industries ranging from transportation to the Internet to ensure that profits earned in Europe by Silicon Valley firms are taxed locally. The EU parliament even proposed legislation to break up "digital monopolies" such as Google. This proposal would require Google to offer search services independently as a standalone company from its other online services, including Google Drive, a cloud-based file storage and synchronization service. But the EU wariness extends beyond tax revenue: The Eurozone has much stronger legal requirements and cultural expectations concerning data privacy. Taken together, political/legal environments can have a direct bearing on a firm's performance.



Amazon is preparing to use drones for package delivery.
© Amazon/Zuma Press/Newscom

Governments can often wield positive legal and political mechanisms to achieve desired changes in consumer behavior. For example, to encourage consumers to buy zero-emission vehicles, the U.S. government offers a $7,500 federal tax credit with the purchase of a new electric vehicle such as the Chevy Bolt, Nissan Leaf, or Tesla Model S.

You see the influence of multiple PESTEL factors affecting the implementation of drones for commercial purposes. Amazon and Alibaba were initially bullish on drones for doorstep delivery of products, but governmental, legal, and technological factors are proving a serious challenge and are delaying the introduction of drones for commercial applications.[13]

LO 3-2

Apply Porter's five competitive forces to explain the profit potential of different industries.

industry A group of incumbent companies that face more or less the same set of suppliers and buyers.

industry analysis A method to (1) identify an industry's profit potential and (2) derive implications for a firm's strategic position within an industry.

3.2 Industry Structure and Firm Strategy: The Five Forces Model

We now move one step closer to the firm (in the center of Exhibit 3.1) and come to the industry in which it competes. An **industry** is a group of incumbent companies facing more or less the same set of suppliers and buyers. Firms competing in the same industry tend to offer similar products or services to meet specific customer needs. Although the PESTEL framework allows us to scan, monitor, and evaluate the external environment to identify opportunities and threats, **industry analysis** provides a more rigorous basis not only to identify an industry's profit potential—the level of profitability that can be

expected for the *average* firm—but also to derive implications for one firm's strategic position within an industry. A firm's **strategic position** relates to its ability to create value for customers (*V*) while containing the cost to do so (*C*). Competitive advantage flows to the firm that is able to create as large a gap as possible between the value the firm's product or service generates and the cost required to produce it (*V* – *C*).

strategic position A firm's strategic profile based on the difference between value creation and cost (*V* – *C*).

Michael Porter developed the highly influential **five forces model** to help managers understand the profit potential of different industries and how they can position their respective firms to gain and sustain competitive advantage.[14] By combining theory from industrial organization economics with hundreds of detailed case studies, Porter derived two key insights that form the basis of his seminal five forces model:

five forces model A framework that identifies five forces that determine the profit potential of an industry and shape a firm's competitive strategy.

1. Rather than defining competition narrowly as the firm's closest competitors to explain and predict a firm's performance, competition must be viewed more broadly, to also encompass the other forces in an industry: buyers, suppliers, potential new entry of other firms, and the threat of substitutes.
2. The profit potential of an industry is neither random nor entirely determined by industry-specific factors. Rather, it is a function of the five forces that shape competition: *threat of entry, power of suppliers, power of buyers, threat of substitutes,* and *rivalry among existing firms.*

COMPETITION IN THE FIVE FORCES MODEL

Because the five forces model has especially powerful implications for strategy and competitive advantage, we will explore it in some detail. We start with the concept of competition. The first major insight this model provides is that competition involves more than just creating economic value; firms must also capture a significant share of it or they will see the economic value they create lost to suppliers, customers, or competitors. Firms create economic value by expanding as much as possible the gap between the value (*V*) the firm's product or service generates and the cost (*C*) to produce it. *Economic value* thus equals *V* minus *C*. To succeed, creating value is not enough. Firms must also be able to capture a significant share of the value created to gain and sustain a competitive advantage.

In Porter's five forces model, competition is more broadly defined beyond the firm's closest competitors (e.g., Nike vs. Under Armour, The Home Depot vs. Lowe's, Merck vs. Pfizer, and so on) to include other industry forces: buyers, suppliers, potential new entry of other firms, and the threat of substitutes. Competition describes the struggle among these forces to capture as much of the economic value created in an industry as possible. A firm's managers, therefore, must be concerned not only with the intensity of rivalry among direct competitors, but also with the strength of the other competitive forces that are attempting to extract part or all of the economic value the firm creates. When faced with competition in this broader sense, strategy explains how a firm is able to achieve superior performance.

The second major insight from the five forces model is that it enables managers to not only understand their industry environment but also shape their firm's strategy. As a rule of thumb, *the stronger the five forces, the lower the industry's profit potential*—making the industry less attractive for competitors. The reverse is also true: *the weaker the five forces, the greater the industry's profit potential*—making the industry more attractive. Therefore, from the perspective of a manager of an existing firm competing for advantage in an established industry, the company should be positioned in a way that relaxes the constraints of strong forces and leverages weak forces. The goal of crafting a strategic position is of course to improve the firm's ability to achieve a competitive advantage.

Strategy Highlight 3.2 provides an overview of the five competitive forces that shape strategy, with an application to the U.S. domestic airline industry. We will take up the topic of competitive positioning in Chapter 6 when studying business-level strategy.

Strategy Highlight 3.2

The Five Forces in the Airline Industry

Although many of the mega-airlines such as American, Delta, and United have lost billions of dollars over the past few decades and continue to struggle to generate consistent profitability, other players in this industry have been quite profitable because they were able to extract some of the economic value created. The airlines, however, benefited from a windfall because the prices for jet fuel fell from a high of $3.25 per gallon (in 2011) to $1.50 (in 2015), giving some reprieve to cash-strapped airlines.

Regardless, the *nature of rivalry* among airlines is incredibly intense, as consumers primarily make decisions based on price. In inflation-adjusted dollars, ticket prices have been falling since industry deregulation in 1978. Thanks to Internet travel sites such as Orbitz, Travelocity, and Kayak, price comparisons are effortless. Consumers benefit from cut-throat price competition between carriers and capture significant value. Low switching costs and nearly perfect information combine to strengthen buyer power. Moreover, large corporate customers can contract with airlines to serve all of their employees' travel needs; such *powerful buyers* further reduce profit margins for air carriers.

Entry barriers are relatively low, resulting in a number of new airlines popping up. To enter the industry (on a small scale, serving a few select cities), a prospective new entrant needs only a couple of airplanes, which can be rented; a few pilots and crew members; some routes connecting city pairs; and gate access in airports. Indeed, despite notoriously low industry profitability, Virgin America entered the U.S. market in 2007. Virgin America is the brainchild of Sir Richard Branson, founder and chairman of the Virgin Group, a UK conglomerate of hundreds of companies using the Virgin brand, including the international airline Virgin Atlantic. Its business strategy is to offer low-cost service between major metropolitan cities on the American East and West Coasts.

In the airline industry, the *supplier power* is also strong. The providers of airframes (e.g., Boeing or Airbus), makers of aircraft engines (e.g., GE or Rolls-Royce), aircraft maintenance companies (e.g., Goodrich), caterers (e.g., Marriott), labor unions, and airports controlling gate access all bargain away the profitability of airlines.

To make matters worse, *substitutes* are also readily available: If prices are seen as too high, customers can drive their cars or use the train or bus. As an example, the route between Atlanta and Orlando (roughly 400 miles) used to be one of the busiest and most profitable ones for Delta. Given the increasing security delays at airports, more and more people now prefer to drive. Taken together, the competitive forces are quite unfavorable for generating a profit potential in the airline industry: low entry barriers, high supplier power, high buyer power combined with low customer switching costs, and the availability of low-cost substitutes. This type of hostile environment leads to intense rivalry among existing airlines and low overall industry profit potential.

The surprising conclusion is that while the mega-airlines themselves (i.e., American, Delta, and United) frequently struggle to make a profit, the other players in the industry—such as the suppliers of aircraft engines, aircraft maintenance companies, IT companies providing reservation and logistics services, caterers, airports, and so on—are quite profitable, all extracting significant value from the air transportation industry. Customers also are better off, as ticket prices have decreased and travel choices increased.[15]

Taking a closer look at the U.S. domestic airline industry in Strategy Highlight 3.2 shows how the five forces framework is a powerful and versatile tool to analyze industries. The five forces model allows managers to analyze all players using a wider industry lens, which in turn enables a deeper understanding of an industry's profit potential. Moreover, a five forces analysis provides the basis for how a firm should position itself to gain and sustain a competitive advantage. We are now ready to take a deep dive and look closer at each of the five competitive forces.

As Exhibit 3.2 shows, Porter's model identifies five key competitive forces that managers need to consider when analyzing the industry environment and formulating competitive strategy:

1. Threat of entry.
2. Power of suppliers.

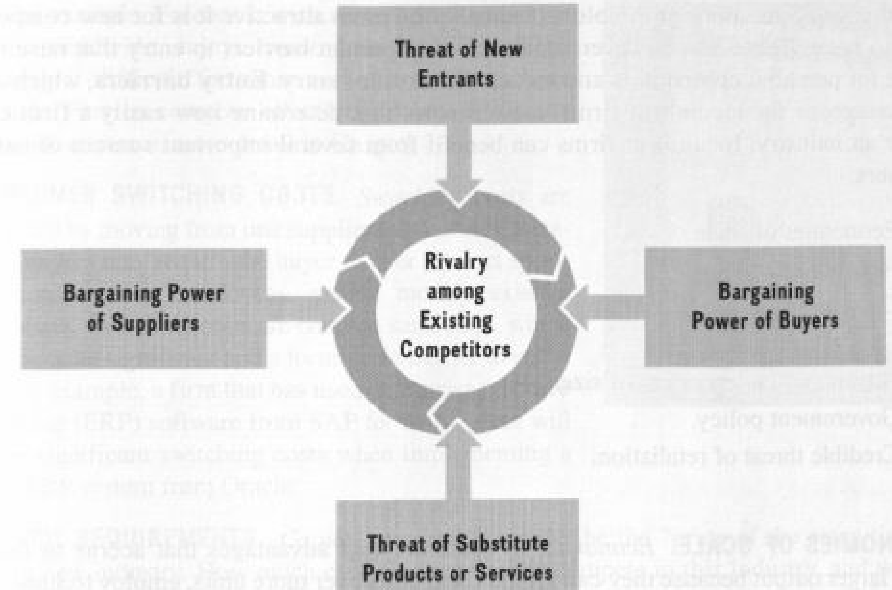


EXHIBIT 3.2 Porter's Five Forces Model

Source: Michael E. Porter, "The five competitive forces that shape strategy," *Harvard Business Review*, January 2008.

3. Power of buyers.
4. Threat of substitutes.
5. Rivalry among existing competitors.

THE THREAT OF ENTRY

The **threat of entry** describes the risk that potential competitors will enter the industry. Potential new entry depresses industry profit potential in two major ways:

threat of entry The risk that potential competitors will enter an industry.

1. With the threat of additional capacity coming into an industry, incumbent firms may lower prices to make entry appear less attractive to the potential new competitors, which would in turn reduce the overall industry's profit potential, especially in industries with slow or no overall growth in demand. Consider the market for new microwaves. Demand consists of the replacement rate for older models and the creation of new households. Since this market grows slowly, if at all, any additional entry would likely lead to excess capacity and lower prices overall.
2. The threat of entry by additional competitors may force incumbent firms to spend more to satisfy their existing customers. This spending reduces an industry's profit potential, especially if firms can't raise prices. Consider how Starbucks has chosen to constantly upgrade and refresh its stores and service offerings. Starbucks has over 11,000 U.S. stores and 22,000 globally. By raising the value of its offering in the eyes of the consumers, it slows others from entering the industry or from rapidly expanding. This allows Starbucks to hold at bay smaller regional competitors, such as Peet's Coffee & Tea, with fewer than 200 stores mostly on the West Coast, and prevents smaller national chains, such as Caribou Coffee, with 415 stores nationally, from increasing the level of competition. Starbucks is willing to accept a lower profit margin to maintain its market share.

entry barriers Obstacles that determine how easily a firm can enter an industry and often significantly predict industry profit potential.

Of course, the more profitable an industry, the more attractive it is for new competitors to enter. There are, however, a number of important barriers to entry that raise the costs for potential competitors and reduce the threat of entry. **Entry barriers**, which are advantageous for incumbent firms, are obstacles that determine how easily a firm can enter an industry. Incumbent firms can benefit from several important sources of entry barriers:

- Economies of scale.
- Network effects.
- Customer switching costs.
- Capital requirements.
- Advantages independent of size.
- Government policy.
- Credible threat of retaliation.

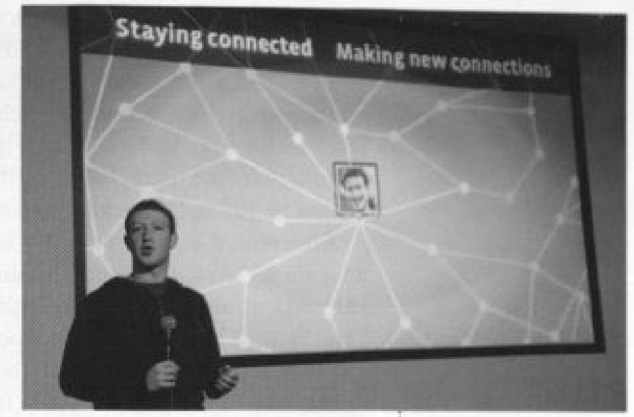
ECONOMIES OF SCALE. *Economies of scale* are cost advantages that accrue to firms with larger output because they can spread fixed costs over more units, employ technology more efficiently, benefit from a more specialized division of labor, and demand better terms from their suppliers. These factors in turn drive down the cost per unit, allowing large incumbent firms to enjoy a cost advantage over new entrants who cannot muster such scale.

We saw the important relationship between scale and production cost in the Tesla ChapterCase. Usually entrants into the broad automobile industry need large-scale production to be efficient. Tesla Motors leveraged new technology to circumvent this entry barrier. Yet, reaching sufficient manufacturing scale to be cost-competitive is critical for Tesla as it is moving more into the mass market.

To benefit from economies of scale, Tesla is introducing new models, helping it move away from small-scale and costly production of niche vehicles to larger production runs of cars with a stronger mass-market appeal. Tesla's first vehicle, the Roadster (costing over $110K) was more or less a prototype to prove the viability of an all-electric car that outperforms high-performance traditional sports cars. For consumers, it created a new mind-set of what electric cars can do. Tesla ended production of the Roadster to focus more fully on its next model: the family sedan, Model S (over $70K). Tesla's manufacturing scale increased more than 20-fold, from some 2,500 Roadsters to 60,000 Model S's. The all-electric car company is hoping for an even broader customer appeal with its Model X, a crossover between an SUV and a family van. Finally, Tesla is betting that its next model, the smaller and lower-priced Model 3 ($35K) will allow the new company to break into the mass market and manufacture many more cars. Tesla CEO Musk set an audacious goal of selling 500,000 cars a year by 2020, which is needed for the company to be profitable.[16] Tesla's new product introductions over time are motivated by an attempt to capture benefits that accrue to economies of scale.

network effects The value of a product or service for an individual user increases with the number of total users.

NETWORK EFFECTS. **Network effects** describe the positive effect that one user of a product or service has on the value of that product or service for other users. When network effects are present, the value of the product or service increases with the number of users. The threat of potential entry is reduced when network effects are present.



© AP Photo/Jeff Chiu

For example, Facebook, with some 1.5 billion active users worldwide, enjoys tremendous network effects, making it difficult for more recent entrants such as Google Plus to compete effectively. We will discuss network effects in more detail in Chapter 7.

CUSTOMER SWITCHING COSTS. *Switching costs* are incurred by moving from one supplier to another. Changing vendors may require the buyer to alter product specifications, retrain employees, and/or modify existing processes. Switching costs are onetime sunk costs, which can be quite significant and a formidable barrier to entry.

For example, a firm that has used enterprise resource planning (ERP) software from SAP for many years will incur significant switching costs when implementing a new ERP system from Oracle.

CAPITAL REQUIREMENTS. *Capital requirements* describe the "price of the entry ticket" into a new industry. How much capital is required to compete in this industry, and which companies are willing and able to make such investments? Frequently related to economies of scale, capital requirements may encompass investments to set up plants with dedicated machinery, run a production process, and cover start-up losses.

Tesla Motors made a sizable capital investment of roughly $150 million when it purchased the Fremont, California, manufacturing plant from Toyota and upgraded it with a highly automated production process using robots to produce cars of the highest quality at large scale.[17] This strategic commitment, however, is dwarfed by the $5 billion that Tesla is investing to build its battery "gigafactory" in Nevada.[18] The new factory allows Tesla to not only secure supplies of lithium-ion batteries, the most critical and expensive component of an all-electric car, but also build as many as 500,000 vehicles a year.[19] In such cases, the likelihood of entry is determined by not only the level of capital investment required to enter the industry, but also the expected return on investment. The potential new entrant must carefully weigh the required capital investments, the cost of capital, and the expected return. Taken together, the threat of entry is high when capital requirements are low in comparison to the expected returns. If an industry is attractive enough, efficient capital markets are likely to provide the necessary funding to enter an industry. Capital, unlike proprietary technology and industry-specific know-how, is a fungible resource that can be relatively easily acquired in the face of attractive returns.

ADVANTAGES INDEPENDENT OF SIZE. Incumbent firms often possess cost and quality advantages that are independent of size. These advantages can be based on brand loyalty, proprietary technology, preferential access to raw materials and distribution channels, favorable geographic locations, and cumulative learning and experience effects.

Tesla Motors has loyal customers, which strengthens its competitive position and reduces the threat of entry into the all-electric car segment, at least by other start-up companies.[20] Unlike GM or Ford, which spend billions each year on advertising, Tesla doesn't have a large marketing budget. Rather, it relies on word of mouth. It luckily has its own "cool factor" of being different, similar to Apple in its early days. Tesla can back this perception with beautifully designed cars of top-notch quality made domestically in California. Indeed, when *Consumer Reports* tested the Model S, the usually understated magazine concluded: "The Tesla Model S is the best car we ever tested."[21] In addition, many Tesla owners feel an emotional connection to the company because they deeply believe in the company's vision "to accelerate the advent of sustainable transport by bringing compelling mass market electric cars to market as soon as possible."[22]

Patents and trade secrets, such as the original Coke formula, are examples of proprietary technology and know-how that can also reduce the threat of entry. The value of trade secrets to a firm is reflected in the efforts to improve cybersecurity so that trade secrets cannot be stolen by hacking into corporate computers.

Preferential access to raw materials and key components can bestow absolute cost advantages. As mentioned, lithium-ion batteries are not only the most expensive and critical parts of an all-electric vehicle, but they are also in short supply. Tesla's new battery "gigafactory" will afford it independence from the few worldwide suppliers, such as Panasonic of Japan, and also likely bestow an absolute cost advantage.[23] This should further reduce the threat of new entry in the all-electric vehicle segment, assuming no radical technological changes are to be expected in battery-cell technology in the next few years.

Favorable locations, such as Silicon Valley for Tesla Motors, often present advantages that other locales cannot match easily, including access to human and venture capital, and world-class research and engineering institutions.

Finally, incumbent firms often benefit from cumulative learning and experience effects accrued over long periods of time. Tesla Motors now has more than 10 years of experience in designing and building high-performance all-electric vehicles of superior quality and design. Attempting to obtain such deep knowledge within a shorter time frame is often costly, if not impossible, which in turn constitutes a formidable barrier to entry.

GOVERNMENT POLICY. Frequently government policies restrict or prevent new entrants. Until recently, India did not allow foreign retailers such as Walmart or IKEA to own stores and compete with domestic companies in order to protect the country's millions of small vendors and wholesalers. China frequently requires foreign companies to enter joint ventures with domestic ones and to share technology.

In contrast, deregulation in industries such as airlines, telecommunications, and trucking have generated significant new entries. Therefore, the threat of entry is high when restrictive government policies do not exist or when industries become deregulated.

CREDIBLE THREAT OF RETALIATION. Potential new entrants must also anticipate how incumbent firms will react. A credible threat of retaliation by incumbent firms often deters entry. Should entry still occur, however, incumbents are able to retaliate quickly, through initiating a price war, for example. The industry profit potential can in this case easily fall below the cost of capital. Incumbents with deeper pockets than new entrants are able to withstand price competition for a longer time and wait for the new entrants to exit the industry—then raise prices again. Other weapons of retaliation include increased product and service innovation, advertising, sales promotions, and litigation.

Potential new entrants should expect a strong and vigorous response beyond price competition by incumbent firms in several scenarios. If the current competitors have deep pockets, unused excess capacity, reputational clout with industry suppliers and buyers, a history of vigorous retaliation during earlier entry attempts, or heavy investments in resources specific to the core industry and ill-suited for adaptive use, then they are likely to press these advantages. Moreover, if industry growth is slow or stagnant, incumbents are more likely to retaliate against new entrants to protect their market share, often initiating a price war with the goal of driving out these new entrants.

In contrast, the threat of entry is high when new entrants expect that incumbents will not or cannot retaliate. For example, in the southeastern United States, TV cable company

Comcast has entered the market for residential and commercial telephone services and Internet connectivity (as an ISP, Internet service provider), emerging as a direct competitor for AT&T. Comcast also acquired NBC Universal, combining delivery and content. AT&T responded to Comcast's threat by introducing U-verse, a product combining high-speed Internet access with cable TV and telephone service, all provided over its fast fiber-optic network.

THE POWER OF SUPPLIERS

The bargaining power of suppliers captures pressures that industry suppliers can exert on an industry's profit potential. This force reduces a firm's ability to obtain superior performance for two reasons: Powerful suppliers can raise the cost of production by demanding higher prices for their inputs or by reducing the quality of the input factor or service level delivered. Powerful suppliers are a threat to firms because they reduce the industry's profit potential by capturing part of the economic value created.

To compete effectively, companies generally need a wide variety of inputs into the production process, including raw materials and components, labor (via individuals or labor unions, when the industry faces collective bargaining), and services. The relative bargaining power of suppliers is high when

- The suppliers' industry is more concentrated than the industry it sells to.
- Suppliers do not depend heavily on the industry for a large portion of their revenues.
- Incumbent firms face significant switching costs when changing suppliers.
- Suppliers offer products that are differentiated.
- There are no readily available substitutes for the products or services that the suppliers offer.
- Suppliers can credibly threaten to forward-integrate into the industry.

In Strategy Highlight 3.2, we noted that the airline industry faces strong supplier power. Let's take a closer look at one important supplier group to this industry: Boeing and Airbus, the makers of large commercial jets. The reason airframe manufacturers are powerful suppliers to airlines is because their industry is much more concentrated (only two firms) than the industry it sells to. Compared to two airframe suppliers, there are hundreds of commercial airlines around the world. Given the trend of large airlines merging to create even larger mega-airlines, however, increasing buyer power may eventually balance this out a bit. Nonetheless, the airlines face nontrivial switching costs when changing suppliers because pilots and crew would need to be retrained to fly a new type of aircraft, maintenance capabilities would need to be expanded, and some routes may even need to be reconfigured due to differences in aircraft range and passenger capacity. Moreover, while some of the aircraft can be used as substitutes, Boeing and Airbus offer differentiated products. This fact becomes clearer when considering the most recent models from each company. Boeing introduced the 787 Dreamliner to capture long-distance point-to-point travel (close to an 8,000-mile range, sufficient to fly non-stop from Los Angeles to Sydney), while Airbus introduced the A-380 Superjumbo to focus on high-volume transportation (close to 900 passengers) between major airport hubs (e.g., Tokyo's Haneda Airport and Singapore's International Airport). When considering long-distance travel, there are no readily available substitutes for commercial airliners, a fact that strengthens supplier power.

All in all, the vast strengths of these factors lead us to conclude that the supplier power of commercial aircraft manufacturers is quite significant. This puts Boeing and Airbus in a strong position to extract profits from the airline industry, thus reducing the profit potential of the airlines themselves.

Retailers claim they schedule Black Friday sales events because the buyers demand it. We can see this phenomenon as one example of the power of buyers demanding discounted goods, thus reducing the ability of retailers to retain the economic value they have created.
© John Gress/Corbis

Although the supplier power of Boeing and Airbus is strong, several factors moderate their bargaining positions somewhat. First, the suppliers of commercial airliners depend heavily on commercial airlines for their revenues. Second, Boeing and Airbus are unlikely to threaten forward integration and become commercial airlines themselves. Third, Bombardier of Canada and Embraer of Brazil, both manufacturers of smaller commercial airframes, have begun to increase the size of the jets they offer, and thus now compete with some of the smaller planes such as Boeing's 737 and Airbus' A-320. Finally, industry structures are not static, but can change over time. In the last few years, several of the remaining large domestic U.S. airlines have merged (Delta and Northwest, United and Continental, and American and U.S. Airways), which changed the industry structure in their favor. There are now fewer but even larger airlines remaining. This fact increases their buyer power, which we turn to next.

THE POWER OF BUYERS

In many ways, the bargaining power of buyers is the flip side of the bargaining power of suppliers. Buyers are the customers of an industry. The power of buyers concerns the pressure an industry's customers can put on the producer's margins in the industry by demanding a lower price or higher product quality. When buyers successfully obtain price discounts, it reduces a firm's top line (revenue). When buyers demand higher quality and more service, it generally raises production costs. Strong buyers can therefore reduce industry profit potential and a firm's profitability. Powerful buyers are a threat to the producing firms because they reduce the industry's profit potential by capturing part of the economic value created.

As with suppliers, an industry may face many different types of buyers. The buyers of an industry's product or service may be individual consumers—like you or me when we decide which provider we want to use for our wireless devices. In many areas, you can choose between several providers such as AT&T, Sprint, T-Mobile, or Verizon. Although we might be able to find a good deal when carefully comparing their individual service plans, as individual consumers we generally do not have significant buyer power. On the other hand, large institutions such as businesses or universities have significant buyer power when deciding which provider to use for their wireless services, because they are able to sign up or move several thousand employees at once.

The power of buyers is high when

- There are a few buyers and each buyer purchases large quantities relative to the size of a single seller.
- The industry's products are standardized or undifferentiated commodities.
- Buyers face low or no switching costs.
- Buyers can credibly threaten to backwardly integrate into the industry.

In addition, companies need to be aware of situations when buyers are especially price sensitive. This is the case when:

- The buyer's purchase represents a significant fraction of its cost structure or procurement budget.
- Buyers earn low profits or are strapped for cash.
- The quality (cost) of the buyers' products and services is not affected much by the quality (cost) of their inputs.

The retail giant Walmart provides perhaps the most potent example of tremendous buyer power. Walmart is not only the largest retailer worldwide (with over 11,000 stores and 2.2 million employees), but it is also one of the largest companies in the world (with $485 billion in revenues in 2014). Walmart is one of the few large big-box global retail chains and frequently purchases large quantities from its suppliers. Walmart leverages its buyer power by exerting tremendous pressure on its suppliers to lower prices and to increase quality or risk losing access to shelf space at the largest retailer in the world. Walmart's buyer power is so strong that many suppliers co-locate offices directly next to Walmart's headquarters in Bentonville, Arkansas, because such proximity enables Walmart's managers to test the supplier's latest products and negotiate prices.

© niloo138/123RF

The bargaining power of buyers also increases when their switching costs are low. Having multiple suppliers of a product category located close to its headquarters allows Walmart to demand further price cuts and quality improvements because it can easily switch from one supplier to the next. This threat is even more pronounced if the products are non-differentiated commodities from the consumers' perspective. For example, Walmart can easily switch from Rubbermaid plastic containers to Sterlite containers by offering more shelf space to the producer that offers the greatest price cut or quality improvement.

Buyers are also powerful when they can credibly threaten backward integration. Backward integration occurs when a buyer moves upstream in the industry value chain, into the seller's business. Walmart has exercised the threat to backward-integrate by producing a number of products as private-label brands such as Equate health and beauty items, Ol'Roy dog food, and Parent's Choice baby products. Taken together, powerful buyers have the ability to extract a significant amount of the value created in the industry, leaving little or nothing for producers.

In regard to any of the five forces that shape competition, it is important to note that their relative strengths are context-dependent. For example, the Mexican multinational CEMEX, one of the world's leading cement producers, faces very different buyer power in the United States than domestically. In the United States, cement buyers consist of a few large and powerful construction companies that account for a significant percentage of CEMEX's output. The result? Razor-thin margins. In contrast, the vast majority of CEMEX's customers in its Mexican home market are numerous, small, individual customers facing a few large suppliers, with CEMEX being the biggest. CEMEX earns high profit margins in its home market. With the same undifferentiated product, CEMEX competes in two different industry scenarios in terms of buyer strength.

THE THREAT OF SUBSTITUTES

Substitutes meet the same basic customer needs as the industry's product but in a different way. The threat of substitutes is the idea that products or services available from *outside the* *given industry* will come close to meeting the needs of current customers.[24] For example, many software products are substitutes to professional services, at least at the lower end. Tax preparation software such as Intuit's TurboTax is a substitute for professional services offered by H&R Block and others. LegalZoom, an online legal documentation service, is a threat to professional law firms. Other examples of substitutes are energy drinks versus coffee, videoconferencing versus business travel, e-mail versus express mail, gasoline versus biofuel, and wireless telephone services versus Voice over Internet Protocol (VoIP), offered by Skype or Vonage.

A high threat of substitutes reduces industry profit potential by limiting the price the industry's competitors can charge for their products and services. The threat of substitutes is high when:

- The substitute offers an attractive price-performance trade-off.
- The buyer's cost of switching to the substitute is low.

The movie rental company Redbox, which uses 44,000 kiosks in the United States to make movie rentals available for just $1.50, is a substitute for buying movie DVDs. For buyers, video rental via Redbox offers an attractive price-performance trade-off with low switching costs in comparison to DVD ownership. Moreover, for customers that view only a few movies a month, Redbox is also a substitute for Netflix's on-demand Internet movie streaming service, which costs $7.99 a month. Rather than a substitute, however, Redbox is a direct competitor to Netflix's DVD rental business, where plans also cost $7.99 a month (for one DVD out at a time).

In addition to a lower price, substitutes may also become more attractive by offering a higher value proposition.[25] In Spain, some 6 million people travel annually between Madrid and Barcelona, roughly 400 miles apart. The trip by car or train takes most of the day, and 90 percent of travelers would choose to fly, creating a highly profitable business for local airlines. This all changed when the Alta Velocidad Española (AVE), an ultra-modern high-speed train, was completed in 2008. Taking into account total time involved, high-speed trains are faster than short-haul flights. Passengers travel in greater comfort than airline passengers and commute from one city center to the next, with only a short walk or cab ride to their final destinations.

The AVE example highlights the two fundamental insights provided by Porter's five forces framework. First, competition must be defined more broadly to go beyond direct industry competitors. In this case, rather than defining competition narrowly as the firm's closest competitors, airline executives in Spain must look beyond other airlines and consider substitute offerings such as high-speed trains. Second, any of the five forces on its own, if sufficiently strong, can extract industry profitability. In the AVE example, the threat of substitutes is limiting the airline industry's profit potential. With the arrival of the AVE, the airlines' monopoly on fast transportation between Madrid and Barcelona vanished, and with it the airlines' high profits. The strong threat of substitutes in this case increased the rivalry among existing competitors in the Spanish air transportation industry.

LO 3-3

Explain how competitive industry structure shapes rivalry among competitors.

RIVALRY AMONG EXISTING COMPETITORS

Rivalry among existing competitors describes the intensity with which companies within the same industry jockey for market share and profitability. It can range from genteel to cut-throat. The other four forces—threat of entry, the power of buyers and suppliers, and the threat of substitutes—all exert pressure upon this rivalry, as indicated by the arrows pointing toward the center in Exhibit 3.2. The stronger the forces, the stronger the expected competitive intensity, which in turn limits the industry's profit potential.

Competitors can lower prices to attract customers from rivals. When intense rivalry among existing competitors brings about price discounting, industry profitability erodes. Alternatively, competitors can use non-price competition to create more value in terms of product features and design, quality, promotional spending, and after-sales service and support. When non-price competition is the primary basis of competition, costs increase, which can also have a negative impact on industry profitability. However, when these moves create unique products with features tailored closely to meet customer needs and willingness to pay, then average industry profitability tends to increase because producers are able to raise prices and thus increase revenues and profit margins.

The intensity of rivalry among existing competitors is determined largely by the following factors

- Competitive industry structure.
- Industry growth.
- Strategic commitments.
- Exit barriers.

COMPETITIVE INDUSTRY STRUCTURE. The **competitive industry structure** refers to elements and features common to all industries. The structure of an industry is largely captured by

- The number and size of its competitors.
- The firms' degree of pricing power.
- The type of product or service (commodity or differentiated product).
- The height of entry barriers.[26]

competitive industry structure Elements and features common to all industries, including the number and size of competitors, the firms' degree of pricing power, the type of product or service offered, and the height of entry barriers.

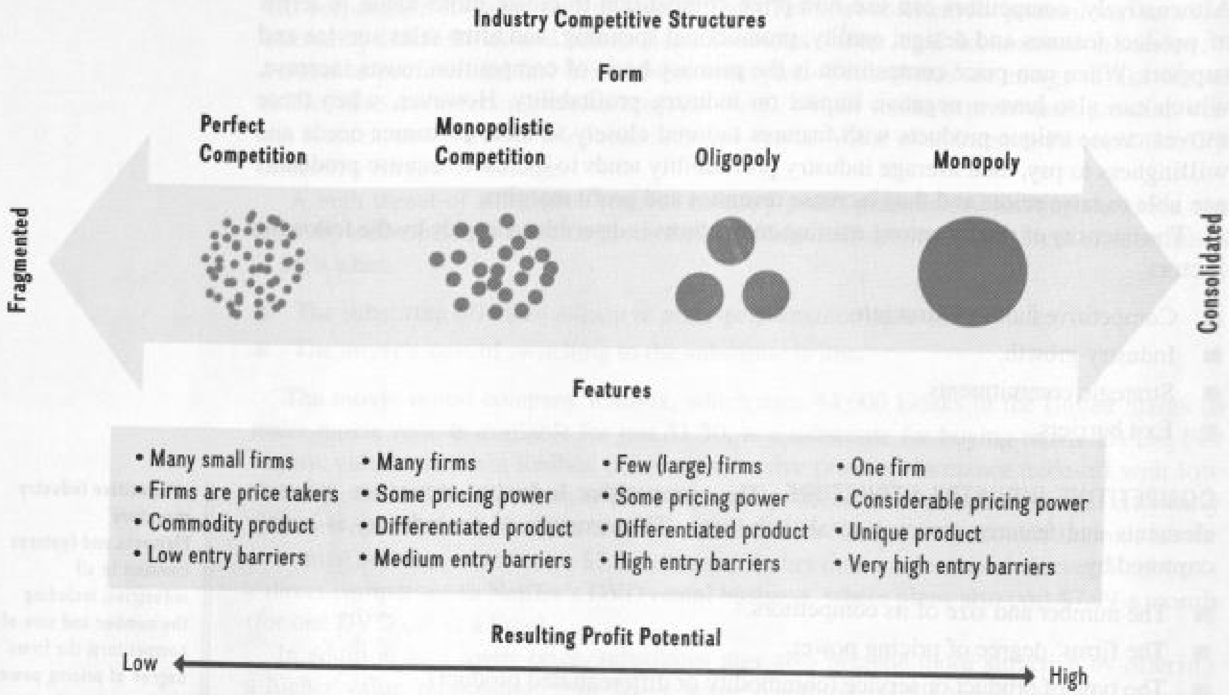
Exhibit 3.3 shows different industry types along a continuum from fragmented to consolidated structures. At one extreme, a *fragmented industry* consists of many small firms and tends to generate low profitability. At the other end of the continuum, a *consolidated industry* is dominated by a few firms, or even just one firm, and has the potential to be highly profitable. The four main competitive industry structures are

(1) perfect competition,
(2) monopolistic competition,
(3) oligopoly, and
(4) monopoly.

Perfect Competition. A *perfectly competitive* industry is fragmented and has many small firms, a commodity product, ease of entry, and little or no ability for each individual firm to raise its prices. The firms competing in this type of industry are approximately similar in size and resources. Consumers make purchasing decisions solely on price, because the commodity product offerings are more or less identical. The resulting performance of the industry shows low profitability. Under these conditions, firms in perfect competition have difficulty achieving even a temporary competitive advantage and can achieve only competitive parity. Although perfect competition is a rare industry structure in its pure form, markets for commodities such as natural gas, copper, and iron tend to approach this structure.

Modern high-tech industries are also not immune to the perils of perfect competition. Many Internet entrepreneurs learned the hard way that it is difficult to beat the forces of perfect competition. Fueled by eager venture capitalists, about 100 online pet supply stores such as *pets.com*, *petopia.com*, and *pet-store.com* had sprung up by 1999, at the height of the Internet bubble.[27] Cut-throat competition ensued, with online retailers selling products

EXHIBIT 3.3 / Industry Competitive Structures along the Continuum from Fragmented to Consolidated



below cost. When there are many small firms offering a commodity product in an industry that is easy to enter, no one is able to increase prices and generate profits. To make matters worse, at the same time, category-killers such as PetSmart and PetCo were expanding rapidly, opening some 2,000 brick-and-mortar stores in the United States and Canada. The ensuing price competition led to an industry shakeout, leaving online retailers in the dust. Looking at the competitive industry structures depicted in Exhibit 3.3, we might have predicted that online pet supply stores were unlikely to be profitable.

Monopolistic Competition. A *monopolistically competitive* industry has many firms, a differentiated product, some obstacles to entry, and the ability to raise prices for a relatively unique product while retaining customers. The key to understanding this industry structure is that the firms now offer products or services with unique features.

The computer hardware industry provides one example of monopolistic competition. Many firms compete in this industry, and even the largest of them (Apple, ASUS, Dell, HP, or Lenovo) have less than 20 percent market share. Moreover, while products between competitors tend to be similar, they are by no means identical. As a consequence, firms selling a product with unique features tend to have some ability to raise prices. When a firm is able to differentiate its product or service offerings, it carves out a niche in the market in which it has some degree of monopoly power over pricing, thus the name "monopolistic competition." Firms frequently communicate the degree of product differentiation through advertising.

Oligopoly. An *oligopolistic* industry is consolidated with a few large firms, differentiated products, high barriers to entry, and some degree of pricing power. The degree of pricing power depends, just as in monopolistic competition, on the degree of product differentiation.

A key feature of an oligopoly is that the competing firms are *interdependent.* With only a few competitors in the mix, the actions of one firm influence the behaviors of the

others. Each competitor in an oligopoly, therefore, must consider the strategic actions of the other competitors. This type of industry structure is often analyzed using *game theory,* which attempts to predict strategic behaviors by assuming that the moves and reactions of competitors can be anticipated.[28] Due to their strategic interdependence, companies in oligopolies have an incentive to coordinate their strategic actions to maximize joint performance. Although explicit coordination such as price fixing is illegal in the United States, tacit coordination such as "an unspoken understanding" is not.

The express-delivery industry is an example of an oligopoly. The main competitors in this space are FedEx and UPS. Any strategic decision made by FedEx (e.g., to expand delivery services to ground delivery of larger-size packages) directly affects UPS; likewise, any decision made by UPS (e.g., to guarantee next-day delivery before 8:00 a.m.) directly affects FedEx. Other examples of oligopolies include the soft drink industry (Coca-Cola vs. Pepsi), airframe manufacturing business (Boeing vs. Airbus), home-improvement retailing (The Home Depot vs. Lowe's), toys and games (Hasbro vs. Mattel), and detergents (P&G vs. Unilever).[29]

Companies in an oligopoly tend to have some pricing power if they are able to differentiate their product or service offerings from those of their competitors. *Non-price competition,* therefore, is the preferred mode of competition. This means competing by offering unique product features or services rather than competing based on price alone. When one firm in an oligopoly cuts prices to gain market share from its competitor, the competitor typically will respond in kind and also cut prices. This process initiates a price war, which can be especially detrimental to firm performance if the products are close rivals.

In the early years of the soft drink industry, for example, whenever Pepsi lowered prices, Coca-Cola followed suit. These actions only resulted in reduced profitability for both companies. In recent decades, both Coca-Cola and Pepsi have repeatedly demonstrated that they have learned this lesson. They shifted the basis of competition from price-cutting to new product introductions and lifestyle advertising. Any price adjustments are merely short-term promotions. By leveraging innovation and advertising, Coca-Cola and Pepsi have moved to non-price competition, which in turn allows them to charge higher prices and to improve industry and company profitability.[30]

Monopoly. An industry is a *monopoly* when there is only one, often large firm supplying the market. The firm may offer a unique product, and the challenges to moving into the industry tend to be high. The monopolist has considerable pricing power. As a consequence, firm and thus industry profit tends to be high. The one firm is the industry.

In some instances, the government will grant one firm the right to be the sole supplier of a product or service. This is often done to incentivize a company to engage in a venture that would not be profitable if there was more than one supplier. For instance, public utilities incur huge fixed costs to build plants and to supply a certain geographic area. Public utilities supplying water, gas, and electricity to businesses and homes are frequently monopolists. As examples, Georgia Power is the only supplier of electricity for some 2.5 million customers in the southeastern United States. Philadelphia Gas Works is the only supplier of natural gas in the city of Philadelphia, Pennsylvania, serving some 500,000 customers. These are so-called *natural monopolies.* Without them, the governments involved believe the market would not supply these products or services. In the past few decades, however, more and more of these natural monopolies have been deregulated in the United States, including airlines, telecommunications, railroads, trucking, and ocean transportation. This deregulation has allowed competition to emerge, which frequently leads to lower prices, better service, and more innovation.

While natural monopolies appear to be disappearing from the competitive landscape, so-called *near monopolies* are of much greater interest to strategists. These are firms that have accrued significant market power, for example, by owning valuable patents or proprietary technology. In the process, they are changing the industry structure in their favor, generally from monopolistic competition or oligopolies to near monopolies. These near monopolies are firms that have accomplished product differentiation to such a degree that they are in a class by themselves, just like a monopolist. The European Union, for example, views Google with its 90 percent market share in online search as a "digital monopoly."[31] This is an enviable position in terms of the ability to extract profits by leveraging its data to provide targeted online advertising and other customized services, so long as Google can steer clear of monopolistic behavior, which may attract antitrust regulators and lead to legal repercussions.

INDUSTRY GROWTH. Industry growth directly affects the intensity of rivalry among competitors. In periods of high growth, consumer demand rises, and price competition among firms frequently decreases. Because the pie is expanding, rivals are focused on capturing part of that larger pie rather than taking market share and profitability away from one another. The demand for knee replacements, for example, is a fast-growing segment in the medical products industry. In the United States, robust demand is driven by the need for knee replacements for an aging population as well as for an increasingly obese population. The leading competitors are Zimmer Biomet, DePuy, and Stryker, with significant share held by Smith & Nephew. Competition is primarily based on innovative design, improved implant materials, and differentiated products such as gender solutions and a range of high-flex knees. With improvements to materials and procedures, younger patients are also increasingly choosing early surgical intervention. Competitors are able to avoid price competition and, instead, focus on differentiation that allows premium pricing.

Competition in the knee replacement industry is primarily based on innovative design, improved implant materials, and differentiated products.
© BSIP/UIG/Getty Images

In contrast, rivalry among competitors becomes fierce during slow or even negative industry growth. Price discounts, frequent new product releases with minor modifications, intense promotional campaigns, and fast retaliation by rivals are all tactics indicative of an industry with slow or negative growth. Competition is fierce because rivals can gain only at the expense of others; therefore, companies are focused on taking business away from one another. Demand for traditional fast food providers such as McDonald's, Burger King, and Wendy's has been declining in recent years. Consumers have become more health-conscious and demand has shifted to alternative restaurants such as Subway, Chick-fil-A, and Chipotle. Attempts by McDonald's, Burger King, and Wendy's to steal customers from one another include frequent discounting tactics such as dollar menus. Such competitive tactics are indicative of cut-throat competition and a low profit potential in the traditional hamburger fast food industry.

Competitive rivalry based solely on cutting prices is especially destructive to profitability because it transfers most, if not all, of the value created in the industry to the customers—leaving little, if anything, for the firms in the industry. While this may appear attractive to customers, firms that are not profitable are not able to make the investments necessary to upgrade their product offerings or services to provide higher value, and they eventually leave the industry. Destructive price competition can lead to limited choices,

lower product quality, and higher prices for consumers in the long run if only a few large firms survive.

STRATEGIC COMMITMENTS. If firms make strategic commitments to compete in an industry, rivalry among competitors is likely to be more intense. We defined *strategic commitments* (in Chapter 2) as firm actions that are costly, long-term oriented, and difficult to reverse. Strategic commitments to a specific industry can stem from large, fixed cost requirements, but also from non-economic considerations.[32]

For example, significant strategic commitments are required to compete in the airline industry when using a hub-and-spoke system to provide not only domestic but also international coverage. U.S. airlines Delta, United, and American have large fixed costs to maintain their network of routes that affords global coverage, frequently in conjunction with foreign partner airlines. These fixed costs in terms of aircraft, gate leases, hangars, maintenance facilities, baggage facilities, and ground transportation all accrue before the airlines sell any tickets. High fixed costs create tremendous pressure to fill empty seats. An airline seat on a specific flight is perishable, just like hotel rooms not filled. Empty airline seats are often filled through price-cutting. Given similar high fixed costs, other airlines respond in kind. Eventually, a vicious cycle of price-cutting ensues, driving average industry profitability to zero, or even negative numbers (where the companies are losing money). To make matters worse, given their strategic commitments, airlines are unlikely to exit an industry. Excess capacity remains, further depressing industry profitability.

In other cases, strategic commitments to a specific industry may be the result of more political than economic considerations. Airbus, for example, was created by a number of European governments through direct subsidies to provide a countervailing power to Boeing. The European Union in turn claims that Boeing is subsidized by the U.S. government indirectly via defense contracts. Given these political considerations and large-scale strategic commitments, neither Airbus nor Boeing is likely to exit the aircraft manufacturing industry even if industry profit potential falls to zero.

EXIT BARRIERS. The rivalry among existing competitors is also a function of an industry's **exit barriers,** the obstacles that determine how easily a firm can leave that industry. Exit barriers comprise both economic and social factors. They include fixed costs that must be paid regardless of whether the company is operating in the industry or not. A company exiting an industry may still have contractual obligations to suppliers, such as employee health care, retirement benefits, and severance pay. Social factors include elements such as emotional attachments to certain geographic locations. In Michigan, entire communities still depend on GM, Ford, and Chrysler. If any of those carmakers were to exit the industry, communities would suffer. Other social and economic factors include ripple effects through the supply chain. When one major player in an industry shuts down, its suppliers are adversely impacted as well.

exit barriers Obstacles that determine how easily a firm can leave an industry.

An industry with low exit barriers is more attractive because it allows underperforming firms to exit more easily. Such exits reduce competitive pressure on the remaining firms because excess capacity is removed. In contrast, an industry with high exit barriers reduces its profit potential because excess capacity still remains. All of the large airlines featured in Strategy Highlight 3.2 (American, Delta, and United) have filed for bankruptcy at one point. Due to a unique feature of U.S. Chapter 11 bankruptcy law, however, companies may continue to operate and reorganize while being temporarily shielded from their creditors and other obligations until renegotiated. This implies that excess capacity is not removed from the industry, and by putting pressure on prices further reduces industry profit potential.

To summarize our discussion of the five forces model, Exhibit 3.4 provides a checklist that you can apply to any industry when assessing the underlying competitive forces that

EXHIBIT 3.4 /

The Five Forces Competitive Analysis Checklist

The threat of entry is high when:

- √ The minimum efficient scale to compete in an industry is low.
- √ Network effects are not present.
- √ Customer switching costs are low.
- √ Capital requirements are low.
- √ Incumbents do not possess:
  - Brand loyalty.
  - Proprietary technology.
  - Preferential access to raw materials.
  - Preferential access to distribution channels.
  - Favorable geographic locations.
  - Cumulative learning and experience effects.
- √ Restrictive government regulations do not exist.
- √ New entrants expect that incumbents will not or cannot retaliate.

The power of suppliers is high when:

- √ Suppliers' industry is more concentrated than the industry it sells to.
- √ Suppliers do not depend heavily on the industry for their revenues.
- √ Incumbent firms face significant switching costs when changing suppliers.
- √ Suppliers offer products that are differentiated.
- √ There are no readily available substitutes for the products or services that the suppliers offer.
- √ Suppliers can credibly threaten to forward-integrate into the industry.

The power of buyers is high when:

- √ There are a few buyers and each buyer purchases large quantities relative to the size of a single seller.
- √ The industry's products are standardized or undifferentiated commodities.
- √ Buyers face low or no switching costs.
- √ Buyers can credibly threaten to backwardly integrate into the industry.

The threat of substitutes is high when:

- √ The substitute offers an attractive price–performance trade-off.
- √ The buyers' cost of switching to the substitute is low.

The rivalry among existing competitors is high when:

- √ There are many competitors in the industry.
- √ The competitors are roughly of equal size.
- √ Industry growth is slow, zero, or even negative.
- √ Exit barriers are high.
- √ Incumbent firms are highly committed to the business.
- √ Incumbent firms cannot read or understand each other's strategies well.
- √ Products and services are direct substitutes.
- √ Fixed costs are high and marginal costs are low.
- √ Excess capacity exists in the industry.
- √ The product or service is perishable.

Source: Adapted from Porter, M.E. (2008), "The five competitive forces that shape strategy," *Harvard Business Review*, January.

shape strategy. The key take-away from the five forces model is that the stronger the forces, the lower the industry's ability to earn above-average profits, and correspondingly, the lower the firm's ability to gain and sustain a competitive advantage. Conversely, the weaker the forces, the greater the industry's ability to earn above-average profits, and correspondingly, the greater the firm's ability to gain and sustain competitive advantage. Therefore, managers need to craft a strategic position for their company that leverages weak forces into opportunities and mitigates strong forces because they are potential threats to the firm's ability to gain and sustain a competitive advantage.

A SIXTH FORCE: THE STRATEGIC ROLE OF COMPLEMENTS

LO 3-4 Describe the strategic role of complements in creating positive-sum co-opetition.

As valuable as the five forces model is for explaining the profit potential and attractiveness of industries, the value of Porter's five forces model can be further enhanced if one also considers the availability of complements.[33]

A **complement** is a product, service, or competency that adds value to the original product offering when the two are used in tandem.[34] Complements increase demand for the primary product, thereby enhancing the profit potential for the industry and the firm. A company is a **complementor** to your company if customers value your product or service offering more when they are able to combine it with the other company's product or service.[35] Firms may choose to provide the complements themselves or work with another company to accomplish this.

complement
A product, service, or competency that adds value to the original product offering when the two are used in tandem.

complementor
A company that provides a good or service that leads customers to value your firm's offering more when the two are combined.

co-opetition
Cooperation by competitors to achieve a strategic objective.

For example, in the smartphone industry, Google complements Samsung. The Korean high-tech company's smartphones are more valuable when they come with Google's Android system installed. At the same time, Google and Samsung are increasingly becoming competitors. With Google's acquisition of Motorola Mobility, the online search company is planning to launch its own line of smartphones and Chromebooks. This development illustrates the process of **co-opetition**, which is cooperation by competitors to achieve a strategic objective. Samsung and Google cooperate as complementors to compete against Apple's strong position in the mobile device industry, while at the same time Samsung and Google are increasingly becoming competitive with one another.

3.3 Changes over Time: Industry Dynamics

LO 3-5 Appraise the role of industry dynamics and industry convergence in shaping the firm's external environment.

Although the five-forces-plus-complements model is useful in understanding an industry's profit potential, it provides only a point-in-time snapshot of a moving target. With this model (as with other static models), one cannot determine the changing speed of an industry or the rate of innovation. This drawback implies that managers must repeat their analysis over time in order to create a more accurate picture of their industry. It is therefore important that managers consider industry dynamics.

Industry structures are not stable over time. Rather, they are dynamic. Since a consolidated industry tends to be more profitable than a fragmented one (see Exhibit 3.3), firms have a tendency to change the industry structure in their favor, making it more consolidated through horizontal mergers and acquisitions. Having fewer competitors generally equates to higher industry profitability. Industry incumbents, therefore, have an incentive to reduce the number of competitors in the industry. With fewer but larger competitors, incumbent firms can mitigate the threat of strong competitive forces such as supplier or buyer power more effectively.

The U.S. domestic airline industry (featured in Strategy Highlight 3.2) has witnessed several large, horizontal mergers between competitors, including Delta and Northwest, United and Continental, Southwest and AirTran, as well as American and U.S. Airways. These moves allow the remaining carriers to enjoy a more benign industry structure. It also allows them to retire some of the excess capacity in the industry as the merged airlines consolidate their networks of routes. The merger activity in the airline industry provides one example of how firms can proactively reshape industry structure in their favor. A more consolidated airline industry is likely to lead to higher ticket prices and fewer choices for customers, but also more profitable airlines.

In contrast, consolidated industry structures may also break up and become more fragmented. This generally happens when there are external shocks to an industry such as deregulation, new legislation, technological innovation, or globalization. For example, the emergence of the Internet moved the stock brokerage business from an oligopoly controlled by full-service firms such as Merrill Lynch and Morgan Stanley to monopolistic competition with many generic online brokers such as Ameritrade, E*TRADE, and Scottrade.

industry convergence A process whereby formerly unrelated industries begin to satisfy the same customer need.

Another dynamic to be considered is **industry convergence**, a process whereby formerly unrelated industries begin to satisfy the same customer need. Industry convergence is often brought on by technological advances. For years, many players in the media industries have been converging due to technological progress in IT, telecommunications, and digital media. Media convergence unites computing, communications, and content, thereby causing significant upheaval across previously distinct industries. Content providers in industries such as newspapers, magazines, TV, movies, radio, and music are all scrambling to adapt. Many standalone print newspapers are closing up shop, while others are trying to figure out how to offer online news content for which consumers are willing to pay.[36] Internet companies such as Google, Facebook, Instagram, LinkedIn, Snapchat, Pinterest, and Twitter are changing the industry structure by constantly morphing their capabilities and forcing old-line media companies such as News Corp., Time Warner, and Disney to adapt. Amazon's Kindle, Apple's iPad, Google's Chromebook, and Samsung's Galaxy Tab provide a new form of content delivery that has the potential to make print media obsolete.

LO 3-6 Generate a strategic group model to reveal performance differences between clusters of firms in the same industry.

3.4 Performance Differences within the Same Industry: Strategic Groups

strategic group The set of companies that pursue a similar strategy within a specific industry.

strategic group model A framework that explains differences in firm performance within the same industry.

In further analyzing the firm's external environment to explain performance differences, we now move to firms *within the same industry.* As noted earlier in the chapter, a firm occupies a place within a **strategic group**, a set of companies that pursue a similar strategy within a specific industry in their quest for competitive advantage (see Exhibit 3.1).[37] Strategic groups differ from one another along important dimensions such as expenditures on research and development, technology, product differentiation, product and service offerings, pricing, market segments, distribution channels, and customer service.

To explain differences in firm performance within the same industry, the **strategic group model** clusters different firms into groups based on a few key strategic dimensions.[38] Even within the same industry, firm performances differ depending on strategic group membership. Some strategic groups tend to be more profitable than others. This difference implies that firm performance is determined not only by the industry to which the firm belongs, but also by its strategic group membership.

The distinct differences across strategic groups reflect the business strategies that firms pursue. Firms in the same strategic group tend to follow a similar strategy. Companies in the same strategic group, therefore, are direct competitors. The rivalry among firms *within* the same strategic group is generally more intense than the rivalry *among* strategic groups: *intra-group rivalry exceeds inter-group rivalry.* The number of different business strategies pursued within an industry determines the number of strategic groups in that industry. In most industries, strategic groups can be identified along a fairly small number of dimensions. In many instances, two strategic groups are in an industry based on two different business strategies: one that pursues a low-cost strategy and a second that pursues a differentiation strategy (see Exhibit 3.5). We'll discuss each of these generic business strategies in detail in Chapter 6.

THE STRATEGIC GROUP MODEL

To understand competitive behavior and performance within an industry, we can map the industry competitors into strategic groups. We do this as shown:

- Identify the most important strategic dimensions such as expenditures on research and development, technology, product differentiation, product and service offerings, pricing, market segments, distribution channels, and customer service.
- Choose two key dimensions for the horizontal and vertical axes, which expose important differences among the competitors. The dimensions chosen for the axes should *not* be highly correlated.
- Graph the firms in the strategic group, indicating each firm's market share by the size of the bubble with which it is represented.[39]

The U.S. domestic airline industry (featured in Strategy Highlight 3.2) provides an illustrative example. Exhibit 3.5 maps companies active in this industry. The two strategic dimensions on the axes are prices and routes. As a result of this mapping, two strategic groups become apparent, as indicated by the dashed circles: Group A, low-cost, point-to-point airlines (Virgin Atlantic, Alaska Airlines, JetBlue, and Southwest Airlines) and Group B, differentiated airlines using a hub-and-spoke system (American, Delta, and United). The low-cost, point-to-point airlines are clustered in the lower-left corner because they tend to offer lower ticket prices but generally serve fewer routes due to their point-to-point operating system.

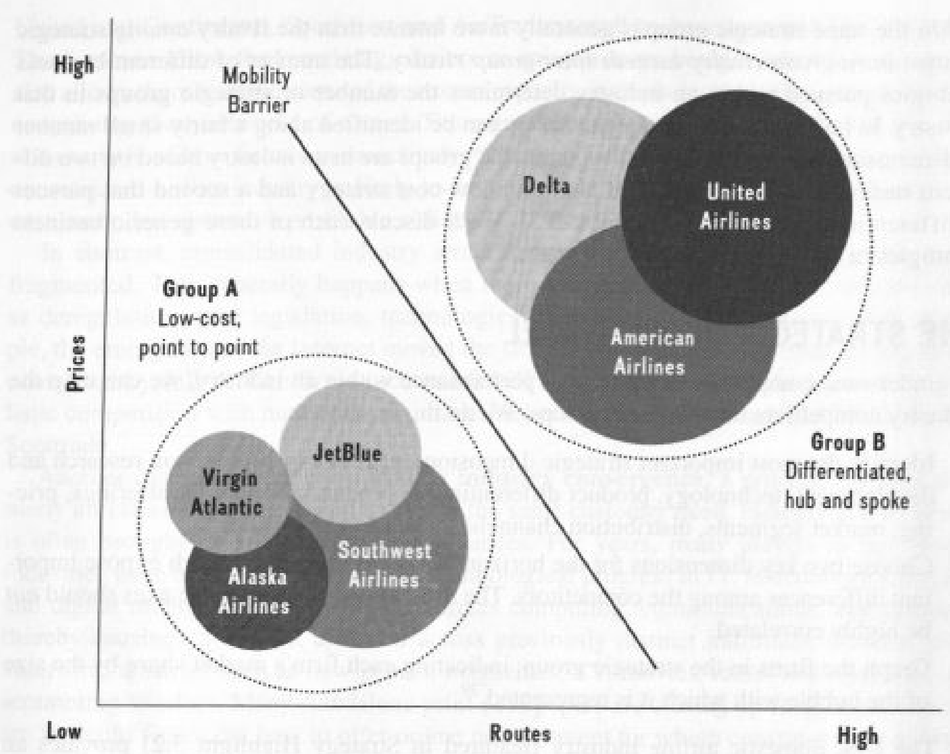
The differentiated airlines in Group B, offering full services using a hub-and-spoke route system, comprise the so-called legacy carriers. They are clustered in the upper-right corner because their frequently higher ticket prices reflect frequently higher cost structures. They usually offer many more routes than the point-to-point low-cost carriers, made possible by use of the hub-and-spoke system, and thus offer many different destinations. For example, Delta's main hub is in Atlanta, Georgia.[40] If you were to fly from Seattle, Washington, to Miami, Florida, you would stop to change planes in Delta's Atlanta hub on your way.

The strategic group mapping in Exhibit 3.5 provides some additional insights:

- **Competitive rivalry is strongest between firms that are within the same strategic group.** The closer firms are on the strategic group map, the more directly and intensely they are in competition with one another. After a wave of mergers, the remaining mega-airlines—American, Delta, and United—are competing head-to-head, not only in the U.S. domestic market but also globally. They tend to monitor one another's strategic actions closely. While Delta faces secondary competition from low-cost carriers such as Southwest Airlines (SWA) on some domestic routes, its primary competitive rivals remain the other legacy carriers. This is because they compete more on providing seamless global services within their respective airline alliances (SkyTeam for Delta, Oneworld for American, and Star Alliance for United) than on low-cost airfares for

EXHIBIT 3.5 /

Strategic Groups and the Mobility Barrier in the U.S. Domestic Airline Industry



particular city pairs in the United States. Nonetheless, when Delta is faced with direct competition from SWA on a particular domestic route (say from Atlanta to Chicago), both tend to offer similar low-cost fares.

- **The external environment affects strategic groups differently.** During times of economic downturn, for example, the low-cost airlines tend to take market share away from the legacy carriers. Moreover, given their generally higher cost structure, the legacy carriers are often unable to stay profitable during recessions, at least on domestic routes. This implies that external factors such as recessions or high oil prices favor the companies in the low-cost strategic group. On the other hand, given a number of governmental restrictions on international air travel, the few airlines that are able to compete globally usually make a tidy profit in this specific industry segment.
- **The five competitive forces affect strategic groups differently.** *Barriers to entry,* for example, are higher in the hub-and-spoke (differentiated) airline group than in the point-to-point (low-cost) airline group. Following deregulation, many airlines entered the industry, but all of these new players used the point-to-point system. Since hub-and-spoke airlines can offer worldwide service and are protected from foreign competition by regulation to some extent, they often face weaker *buyer power,* especially from business travelers. While the hub-and-spoke airlines compete head-on with the point-to-point airlines when they are flying the same or similar routes, the *threat of substitutes* is stronger for the point-to-point airlines. This is because they tend to be regionally focused and compete with the viable substitutes of car, train, or bus travel. The threat of *supplier power* tends to be stronger for the airlines in the point-to-point, low-cost strategic group because they are much smaller and thus have weaker negotiation power when acquiring new aircraft, for example. To get around this, these airlines frequently purchase used aircraft from

legacy carriers. This brief application of the five forces model leads us to conclude that rivalry among existing competitors in the low-cost, point-to-point strategic group is likely to be more intense than within the differentiated, hub-and-spoke strategic group.

- **Some strategic groups are more profitable than others.** Historically, airlines clustered in the lower-left corner tend to be more profitable when considering the U.S. domestic market only. Why? Because they create similar, or even higher, value for their customers in terms of on-time departure and arrival, safety, and fewer bags lost, while keeping ticket costs below those of the legacy carriers. The point-to-point airlines have generally lower costs than the legacy carriers because they are faster in turning their airplanes around, keep them flying longer, use fewer and older airplane models, focus on high-yield city pairs, and tie pay to company performance, among many other activities that all support their low-cost business model. The point-to-point airlines, therefore, are able to offer their services at a lower cost and a higher perceived value, thus creating the basis for a competitive advantage.

MOBILITY BARRIERS

Although some strategic groups tend to be more profitable and therefore more attractive than others, **mobility barriers** restrict movement between groups. These are industry-specific factors that separate one strategic group from another.[41]

mobility barriers Industry-specific factors that separate one strategic group from another.

The two groups identified in Exhibit 3.5 are separated by the fact that offering international routes necessitates the hub-and-spoke model. Frequently, the international routes tend to be the remaining profitable routes left for the legacy carriers; albeit the up-and-coming Persian Gulf region carriers, in particular Emirates, Etihad Airways, and Qatar Airways, are beginning to threaten this profit sanctuary.[42]

This economic reality implies that if carriers in the lower-left cluster, such as SWA or JetBlue, would like to compete globally, they would likely need to change their point-to-point operating model to a hub-and-spoke model. Or, they could select a few profitable international routes and service them with long-range aircrafts such as Boeing 787s or Airbus A-380s. Adding international service to the low-cost model, however, would require significant capital investments and a likely departure from a well-functioning business model. Additional regulatory hurdles reinforce these mobility barriers, such as the difficulty of securing landing slots at international airports around the world.

Despite using its point-to-point operating system, SWA experienced these and many other challenges when it began offering international flights to selected resort destinations such as Aruba, Cabo San Lucas, Cancun, the Bahamas, and Jamaica: changes to its reservation system, securing passports for crew members, cultural-awareness training, learning instructions in foreign languages, and performing drills in swimming pools on how to evacuate passengers onto life rafts.[43]

3.5 ◂▸ Implications for the Strategist

At the start of the strategic management process, it is critical for managers to conduct a thorough analysis of the firm's external environment to identify threats and opportunities. The initial step is to apply a PESTEL analysis to scan, monitor, and evaluate changes and trends in the firm's macroenvironment. This versatile framework allows managers to track important trends and developments based on the *source* of the external factors: political, economic, sociocultural, technological, ecological, and legal. When applying a PESTEL analysis, the guiding consideration for managers should be the question of how the external factors identified affect the firm's industry environment.

Exhibit 3.1 delineates external factors based on the *proximity* of these external factors by gradually moving from the general to the task environment. The next layer for managers to understand is the industry. Applying Porter's five forces model allows managers to understand the profit potential of an industry and to obtain clues on how to carve out a strategic position that makes gaining and sustaining a competitive advantage more likely. Follow these steps to apply the five forces model:[44]

1. **Define the relevant industry.** In the five forces model, industry boundaries are drawn by identifying a group of incumbent companies that face more or less the same suppliers and buyers. This group of competitors is likely to be an industry if it also has the same entry barriers and a similar threat from substitutes. In this model, therefore, an industry is defined by commonality and overlap in the five competitive forces that shape competition.
2. **Identify the key players in each of the five forces and attempt to group them into different categories.** This step aids in assessing the relative strength of each force. For example, while makers of jet engines (GE, Rolls-Royce, Pratt & Whitney) and local catering services are all suppliers to airlines, their strengths vary widely. Segmenting different players within each force allows you to assess each force at a fine-grained level.
3. **Identify the underlying drivers of each force.** Which forces are strong, and which are weak? And why? Keeping with the airline example, why is the supplier power of jet engine manufacturers strong? Because they are supplying a mission-critical, highly differentiated product for airlines. Moreover, there are only a few suppliers of jet engines worldwide and no viable substitutes.
4. **Assess the overall industry structure.** What is the industry's profit potential? Here you need to identify forces that directly influence industry profit potential, because not all forces are likely to have an equal effect. Focus on the most important forces that drive industry profitability.

The final step in industry analysis is to draw a strategic group map. This exercise allows you to unearth and explain *performance differences within the same industry.* When analyzing a firm's external environment, it is critical to apply the three frameworks introduced in this chapter (PESTEL, Porter's five forces, and strategic group mapping). Taken together, the external environment can determine up to roughly one-half of the performance differences across firms (see Exhibit 1.1).

Although the different models discussed in this chapter are an important step in the strategic management process, they are not without shortcomings. First, all of the models presented are *static.* They provide a snapshot of what is actually a moving target and do not allow for consideration of industry dynamics. However, changes in the external environment can appear suddenly, for example, through black swan events. Industries can be revolutionized by innovation. Strategic groups can be made obsolete through deregulation or technological progress. To overcome this important shortcoming, managers must conduct external analyses at different points in time to gain a sense of the underlying *dynamics.* The frequency with which these tools need to be applied is a function of the rate of change in the industry. The mobile app industry is changing extremely fast, while the railroad industry experiences a less volatile environment.

Second, the models presented in this chapter do not allow managers to fully understand *why* there are performance differences among firms in the *same* industry or strategic group. To better understand differences in firm performance, we must look *inside the firm* to study its resources, capabilities, and core competencies. We do this in the next chapter by moving from external to internal analysis.

CHAPTERCASE 3 / Consider This . . .

ALTHOUGH TESLA MOTORS has successfully entered the U.S. automotive market using innovative new technology, its continued success will depend on other firm and industry factors. While industry forces have been favorable for a long time in the U.S. automotive industry, recent dynamics have lowered the profit potential of competing in this industry and thus reduced its attractiveness. Now that Tesla Motors has demonstrated how new technology can be used to circumvent entry barriers, other new ventures may soon follow. There are also nontraditional competitors entering the electric vehicle market. Google, for example, has been working on a self-driving car, unveiling a prototype in 2015. Apple is also investing in an electric car under the code name "Titan." None of these has the performance of a Tesla, but both are firms with established brands and credibility and significant financial resources. In addition, the old-line car companies are also adopting the new technology by introducing hybrid or all-electric cars, further increasing rivalry in the industry. The Nissan Leaf, with a sticker price of about $30,000 before tax incentives, is the world's best-selling all-electric vehicle worldwide, with more than 200,000 vehicles sold.

One of the biggest PESTEL factors impacting the all-electric car market, however, is that the price for crude oil declined steeply from over $110 per barrel in the summer of 2014 to about $40 by spring 2015. With it, prices for a gallon of regular gas in the United States fell from over $4 in the summer of 2008 to less than $2 by 2015. With low gas prices, Americans prefer to buy large SUVs and trucks, which benefits GM, Ford, and Chrysler. In addition, several states are reducing or phasing out tax credits for alternative-fuel vehicles.

Another external industry force that Tesla Motors currently addresses is the bargaining power of suppliers. Lithium-ion battery packs are not only in short supply but also the single most-expensive component for Tesla's electric engines. These critical inputs are supplied by only a few technology firms, including Panasonic in Japan. Given that these sources are few, the bargaining power of suppliers in the electric car segment is quite high, further limiting the industry's profit potential. To mitigate the strong bargaining power of key suppliers, however, Tesla has committed to building a 980-acre facility near Reno, Nevada, to produce its own lithium-ion batteries to supply its automobile assembly plant in Fremont, California. The new battery plant is slated to begin production in 2017 and requires a $5 billion investment to place the plant near sources of lithium and power it with renewable energy. Questions remain whether lithium-ion batteries will be able to provide the needed performance for battery life and recharging time, or whether a new technology will emerge, making this a large gamble.

Tesla Motors completed its IPO on June 29, 2010, the first IPO by an American automaker since Ford in 1956. On the first day of trading, Tesla's shares closed at $23.89 and generated $226.1 million for the company. By fall 2014, Tesla's stock had risen to over $285 per share before starting to slide below $200 in spring 2015. Nonetheless, Tesla's market capitalization is almost one-half that of GM, although Tesla revenues were a little over $3 billion in 2014, while GM's were $155 billion.[45]

Questions

1. Which PESTEL factors are the most salient for the electric vehicle segment of the car industry? Do you see a future for electric vehicles in the United States? Why or why not?
2. Looking at Porter's five forces of competition, how would you assess the profit potential of the U.S. car industry?
3. Using the five forces model, what implications can we derive for how Tesla Motors should compete in the U.S. car industry? What would be your top three recommendations for Elon Musk? Support your arguments.
4. Draw a strategic group map for the U.S. automotive industry. What are your conclusions?
5. Why do you think that Tesla's market capitalization (Share price × Number of outstanding shares) is roughly 50 percent that of GM, while GM's revenues are more than 50 times larger than that of Tesla Motors?

TAKE-AWAY CONCEPTS

This chapter demonstrated various approaches to analyzing the firm's *external environment,* as summarized by the following learning objectives and related take-away concepts.

LO 3-1 / Generate a PESTEL analysis to evaluate the impact of external forces on the firm.

- A firm's macroenvironment consists of a wide range of political, economic, sociocultural, technological, ecological, and legal (PESTEL) factors that can affect industry and firm performance. These external factors have both domestic and global aspects.
- Political factors describe the influence government bodies can have on firms.
- Economic factors to be considered are growth rates, interest rates, levels of employment, price stability (inflation and deflation), and currency exchange rates.
- Sociocultural factors capture a society's cultures, norms, and values.
- Technological factors capture the application of knowledge to create new processes and products.
- Ecological factors concern a firm's regard for environmental issues such as the natural environment, global warming, and sustainable economic growth.
- Legal factors capture the official outcomes of the political processes that manifest themselves in laws, mandates, regulations, and court decisions.

LO 3-2 / Apply Porter's five competitive forces to explain the profit potential of different industries.

- Competition must be viewed more broadly to encompass not only direct rivals but also a set of other forces in an industry: buyers, suppliers, the potential new entry of other firms, and the threat of substitutes.
- The profit potential of an industry is a function of the five forces that shape competition: (1) threat of entry, (2) power of suppliers, (3) power of buyers, (4) threat of substitutes, and (5) rivalry among existing competitors.
- The stronger a competitive force, the greater the threat it represents. The weaker the competitive force, the greater the opportunity it presents.
- A firm can shape an industry's structure in its favor through its strategy.

LO 3-3 / Explain how competitive industry structure shapes rivalry among competitors.

- The competitive structure of an industry is largely captured by the number and size of competitors in an industry, whether the firms possess some degree of pricing power, the type of product or service the industry offers (commodity or differentiated product), and the height of entry barriers.
- many A perfectly competitive industry is characterized by many small firms, a commodity product, low entry barriers, and no pricing power for individual firms.
- one A monopolistic industry is characterized by many firms, a differentiated product, medium entry barriers, and some pricing power.
- few An oligopolistic industry is characterized by few (large) firms, a differentiated product, high entry barriers, and some degree of pricing power.
- A monopoly exists when there is only one (large) firm supplying the market. In such instances, the firm may offer a unique product, the barriers to entry may be high, and the monopolist usually has considerable pricing power.

LO 3-4 / Describe the strategic role of complements in creating positive-sum co-opetition.

- Co-opetition (co-operation among competitors) can create a positive-sum game, resulting in a larger pie for everyone involved.
- Complements increase demand for the primary product, enhancing the profit potential for the industry and the firm.
- Attractive industries for co-opetition are characterized by high entry barriers, low exit barriers, low buyer and supplier power, a low threat of substitutes, and the availability of complements.

LO 3-5 / Appraise the role of industry dynamics and industry convergence in shaping the firm's external environment.

- Industries are dynamic—they change over time.
- Different conditions prevail in different industries, directly affecting the firms competing in these industries and their profitability.
- In industry convergence, formerly unrelated industries begin to satisfy the same customer need. Such convergence is often brought on by technological advances.

LO 3-6 / Generate a strategic group model to reveal performance differences between clusters of firms in the same industry.

- A strategic group is a set of firms within a specific industry that pursue a similar strategy in their quest for competitive advantage.
- Generally, there are two strategic groups in an industry based on two different business strategies: one that pursues a low-cost strategy and a second that pursues a differentiation strategy.
- Rivalry among firms of the same strategic group is more intense than the rivalry between strategic groups: intra-group rivalry exceeds inter-group rivalry.
- Strategic groups are affected differently by the external environment and the five competitive forces.
- Some strategic groups are more profitable than others.
- Movement between strategic groups is restricted by mobility barriers—industry-specific factors that separate one strategic group from another.

KEY TERMS

Competitive industry structure *(p. 83)*	Exit barriers *(p. 87)*	Network effects *(p. 76)*
Complement *(p. 89)*	Five forces model *(p. 73)*	PESTEL model *(p. 67)*
Complementor *(p. 89)*	Industry *(p. 72)*	Strategic group *(p. 90)*
Co-opetition *(p. 89)*	Industry analysis *(p. 73)*	Strategic group model *(p. 90)*
Entry barriers *(p. 76)*	Industry convergence *(p. 90)*	Strategic position *(p. 73)*
	Mobility barriers *(p. 93)*	Threat of entry *(p. 75)*

DISCUSSION QUESTIONS

1. Why is it important for any organization (firms, nonprofits, etc.) to study and understand its external environment?
2. How do the five competitive forces in Porter's model affect the average profitability of the industry? For example, in what way might weak forces increase industry profits, and in what way do strong forces reduce industry profits? Identify an industry in which many of the competitors seem to be having financial performance problems. Which of the five forces seems to be strongest?
3. What is a strategic group? How can studying such groups be useful in industry analysis?
4. How do mobility barriers affect the structure of an industry? How do they help us explain firm differences in performance?

ETHICAL/SOCIAL ISSUES

1. UBS, a venerable Swiss banking institution with global business activities, experienced the significant implications that political factors can have on the bottom line. The U.S. government alleged that by advertising its "tax savings" advantages to U.S. clients, UBS aided wealthy Americans in siphoning off billions of dollars to a safe haven that the IRS cannot touch. The government requested from UBS the names of 52,000 U.S. citizens who it suspected were tax evaders. Initially, UBS declined to release names, citing Swiss banking laws and regulations that