CHAPTER 8

Globalizing the Value Chain Infrastructure

Globalizing a company's value creation infrastructure—from the sourcing of raw materials and components, to manufacturing and research and development (R&D), to distribution and customer service—has three primary dimensions: (a) deciding which activities to perform in-house and which ones to outsource, and to whom and where; (b) developing the right partnerships to support a company's globalization efforts; and (c) implementing a suitable supply-chain management model for integrating them into a cost-effective, seamless value-creating network. This chapter looks at the first two dimensions; the third—supply-chain management—is the subject of the next chapter.

Core Competencies

Core competencies represent unique capabilities that allow a company to build a competitive advantage. 3M has developed a core competency in coatings. Canon has core competencies in optics, imaging, and microprocessor controls. Procter & Gamble's marketing prowess allows it to adapt more quickly than its rivals to changing opportunities. The development of core competencies has become a key element in building a long-term strategic advantage. An evaluation of strategic resources and capabilities must therefore include assessments of the core competencies a company has or is developing, how they are nurtured, and how they can be leveraged.

Core competencies evolve as a firm develops its business model and incorporates its intellectual assets. Core competencies are not just things a company does particularly well; rather, they are sets of skills or systems that create a uniquely high value for customers at best-in-class levels. To qualify, such skills or systems should contribute to perceived customer benefits, be difficult for competitors to imitate, and allow for leverage across markets. Honda's use of small engine technology in a variety of products—including motorcycles, jet skis, and lawn mowers—is a good example.

Core competencies should be focused on creating value and should be adapted as customer requirements change. Targeting a carefully selected set of core competencies also benefits innovation. Charles Schwab, for example, successfully leveraged its core competency in brokerage services by expanding its client communication methods to include Internet, telephone, offices, and financial advisors.

Hamel and Prahalad suggest three tests for identifying core competencies. First, core competencies should provide access to a broad array of markets. Second, they should help differentiate core products and services. Third, core competencies should be hard to imitate because they represent multiple skills, technologies, and organizational elements.¹

Experience shows that only a few companies have the resources to develop more than a handful of core competencies. Picking the right ones, therefore, is the key. A key question to ask is, which resources or capabilities should be kept in-house and developed into core competencies and which ones should be outsourced? Pharmaceutical companies, for example, increasingly outsource clinical testing in an effort to focus their resource base on drug development. Generally, the development of core competencies should focus on long-term platforms capable of adapting to new market circumstances; on unique sources of leverage in the value chain in which the firm thinks it can dominate; on elements that are important to customers in the long run; and on key skills and knowledge, not on products.

To Outsource or Not to Outsource

Few companies, especially ones with a global presence, are self-sufficient in all of the activities that make up their value chain. Growing global competitive pressures force companies to focus on those activities they judge as critical to their success and excel at—core capabilities in which they have a distinct competitive advantage—and that can be leveraged across geographies and lines of business. Which activities should be kept in house and which ones can effectively be outsourced depends on a host of factors, most prominently the nature of the company's core strategy and dominant value discipline.²

In principle, every functional or value-adding activity, from research to manufacturing to customer service, is a candidate for outsourcing. It is hard to imagine, however, that operationally excellent companies would consider outsourcing activities that are critical to the efficacy of their supply chain. Similarly, companies operating with a customer-intimate business model should be reluctant to outsource customer-service-related functions, while product leaders should nurture their capacity to innovate. That is why Toyota made continuous investments in its production system as it globalized its operations, Procter & Gamble focused on strengthening its world-class innovation and marketing capabilities as it expanded abroad, and Wal-Mart continued to refine its supply-chain management capabilities.

Firms tend to concentrate their investments in global value chain activities that contribute directly to their competitive advantage and, at the same time, help the company retain the right amount of strategic flexibility. Making such decisions is a formidable challenge—capabilities that may seem unrelated at first glance can turn out to be critical for creating an essential advantage when they are combined. As an example, consider the case of a leading consumer packaged-goods company that created strong embedded capabilities in sales. Its smaller brands showed up on retailers' shelves far more regularly than comparable brands from competitors. It was also known for the efficacy of its short-term R&D in rapidly bringing product variations to market. These capabilities are worth investing in separately, but, together, they add up to a substantial advantage over competitors, especially in introducing new products.

Outsourcing and offshoring of component manufacturing and support services can offer compelling strategic and financial advantages including *lower costs, greater flexibility, enhanced expertise, greater discipline*, and *the freedom to focus on core business activities*.

Lower Costs

Savings may result from lower inherent, structural, systemic, or realized costs. A detailed analysis of each of these cost categories can identify the

potential sources of advantage. For example, larger suppliers may capture greater scale benefits than the internal organization. The risk is that efficiency gains lead to lower quality or reliability. Offshoring typically offers significant infrastructure and labor cost advantages over traditional outsourcing. In addition, many offshoring providers have established very large-scale operations that are not economically possible for domestic providers.

Greater Flexibility

Using an outside supplier can sometimes add flexibility to a company such that it can rapidly adjust the scale and scope of production at low cost. As we have learned from the Japanese *keiretsu* and Korean *chaebol* conglomerates, networks of organizations can often adjust to demand more easily than fully integrated organizations.

Enhanced Expertise

Some suppliers may have proprietary access to technology or other intellectual property advantages that a firm cannot access by itself. This technology may improve operational reliability, productivity, efficiency, or long-term total costs and production. The significant scale of today's offshore manufacturers, in particular, allows them to invest in technology that may be cost prohibitive for domestic providers.

Greater Discipline

Separation of purchasers and providers can assist with transparency and accountability in identifying true costs and benefits of certain activities. This can enable transactions under market-based contracts where the focus is on output rather than input. At the same time, competition among suppliers creates choice for purchasers and encourages the adoption of innovative work practices.

Focus on Core Activities

The ability to focus frees up resources internally to concentrate on those activities at which the company has distinctive capability and scale, experience, or differentiation to yield economic benefits. In other words, focus allows a company to concentrate on creating *relative* advantage to maximize total value and allows others to produce supportive goods and services.

While outsourcing is largely about scale and the ability to provide services at a more competitive cost, offshoring is primarily driven by the dramatic wage-cost differentials that exist between developed and developing nations. However, cost should not be the only consideration in making offshoring decisions; other relevant factors include the quality and reliability of labor continuous process improvements, environment, and infrastructure. Political stability and broad economic and legal frameworks should also be taken into account. In reality, even very significant labor cost differentials between countries cannot be the sole driver of offshoring decisions. Companies need to be assured of quality and reliability in the services they are outsourcing. This is the same whether services are outsourced domestically or offshore.

The Growth in Knowledge-Based Outsourcing

In the last 20 years companies have outsourced many activities, including manufacturing, back-office functions, information technology (IT) services, and customer support. Now the focus is shifting to more knowledge-intensive areas, such as product development, R&D, engineering, and analytical services.³ For example, as noted above, pharmaceutical companies depend on a steady pipeline of new products from R&D. The competitive pressures on these firms to bring out new products at an ever rapid pace to meet market needs are increasing. With it, the pressures on the R&D function are increasing. In order to alleviate the pressure, firms have to either increase R&D budgets or find ways to utilize the resources in a more productive way. There are situations when a firm should consider outsourcing some of its R&D work to contract research organizations or universities, for example, when (a) in-house new product design is ineffective or too slow, (b) the company is plagued by consistent project

time and cost overruns, (c) loss of key talent has slowed new product development, (d) there is a need for an immediate competitive response, or (e) when problems of quality or yield reduce R&D effectiveness.

The growth in knowledge-based outsourcing is mainly driven by cost imperatives, but, increasingly, shortages of talent in home markets and the growing availability of skills in nations such as India, China, and Russia play a role. A second driver behind the growth in knowledge-based outsourcing is the increasing "commoditization" of standard business processes and IT services, depressing margins on such activities for outsourcers. This has further encouraged service providers to switch to other activities for which profits are potentially greater-including "innovation services" such as new product development (NPD), R&D, and engineering. According to Booz & Company, there has been 95% growth in the provision of such capabilities since the millennium.⁴ At the same time, providers of standardized services have come to recognize that they need to focus on efficiency and more seamless client integration if they are to continue making sufficient returns. By contrast, innovation services, including everything from prototype design to credit analysis, are more complex and client-specific, and therefore are more likely to command a premium.

For companies considering knowledge-based outsourcing, the lack of standardization means that partner vetting is critical and that outsourcers need to consider investing in captive or near-captive operations that can be sufficiently customized. That may mean turning to smaller providers-that is, those with fewer than 500 employees—that are better able to meet exacting requirements. The process of contracting with multiple, small service providers in different parts of the world is challenging. Many companies are still struggling to integrate more standardized processes with their existing core operations. Outsourcing knowledge-intensive activities will involve a whole new level of managerial complexity, potentially upending fundamental notions of how companies see themselves and what they do. Outsourcing vital activities such as prototype design and engineering support will be fraught with risk, with potentially significant downsides. However, organizations will have little choice: the need to identify talent outside the home territory will force them to work with partners overseas, whatever the pitfalls.

Companies that successfully manage knowledge-based outsourcing are looking to create collaborative management models that share responsibilities, risks, and rewards, enabling both sides to reach their objectives. This "comanagement" approach involves outsourcers treating contractors as valued collaborators even in cases where competitors are employing the same company. It will also necessitate joint investment in offshore staff development, helping providers to retain talent and maintain their revenue margins.

Increased use of knowledge-based offshoring could have significant ramifications on how companies are organized. Rather than multinational organizations with business units staffed by expatriate managers and orchestrated from a central headquarters, the organization of the future will be more globally distributed, with managers seeking out talent wherever it is located and plugging in capabilities when needed. Unlike the outsourcing of the past, knowledge-based offshoring is not simply about labor arbitrage; it is about transforming companies into more nimble, flexible entities.

Minicase 8.1. Outsourcing of R&D in the Pharmaceutical Industry⁵

To cut costs and speed development, Eli Lilly outsources a substantial portion of its R&D—including clinical trials—to countries such as India and China. Lilly is not the only pharmaceutical company that has relocated R&D operations to the developing world; Pfizer tests drugs in Russia, and AstraZeneca conducts clinical trials in China. The main driver is rising development costs, estimated at some \$1.1 billion per drug—including expenses on all the products that do not make it to the market—and expected to increase to \$1.5 billion by 2010.

More recently, Lilly and other drug makers have begun to expand their R&D efforts in India and China to include clinical trials. These are the late-stage experiments to prove a drug can be used on humans. These tests are enormously expensive; Lilly estimates that each Phase III test costs at least \$50 million a year. To reduce costs, Lilly plans to move 20% to 30% of this testing in the next few years. While cost reduction is the main reason for the migration, this migration is made possible by the investments these nations have made in the necessary research labs, hospitals, and professional staffs to conduct studies that meet the stringent regulations of the U.S. Food & Drug Administration or drug regulators in the European Union.

While these outsourcing initiatives are extremely successful, it is unlikely that Lilly will move its entire R&D portfolio abroad. It will likely keep a number of centers of excellence in the United States, renowned for their path-breaking research in cancer and heart disease, to maintain its leadership in these areas and to keep a research presence in the country. Another reason that prevents pharmaceutical companies from outsourcing all of its research is that they may not be able to sell their newest products in countries like India and China because patients cannot afford them or because of worries about patent protection.

Risks Associated With Outsourcing

Outsourcing can have significant benefits but is not without risk.⁶ Some risks, such as potentially higher offshoring costs due to the eroding value of the U.S. dollar, can be anticipated and addressed through contracts by employing financial-hedging strategies. Others, however, are harder to anticipate or deal with.

As a general principle, functions that have the potential to "interrupt" the flow of product or service between a company and its customers are the riskiest to outsource. For example, delegating control of the distribution process to an online retailer can result in customers not receiving goods promptly; outsourcing call-center responsibilities can result in customers being dissatisfied with the product or service and, thus, in higher product returns, lower repurchases, or complaints that could endanger the company's reputation.

The second riskiest type of activity to outsource is one that affects the relationship between a company and its employees. Outsourcing the human resources function, for example, can affect employee-hiring quality; outsourcing payroll and benefits processing can result in information breaches that generate identity theft issues and resultant legal issues; or outsourcing software design can generate a decline in organizational innovation. By contrast, support functions such as accounts payable and maintenance are less risky to outsource because they have few direct links to customers or internal organizational processes.

More formally, risks associated with outsourcing typically fall into four general categories: *loss of control, loss of innovation, loss of organizational trust,* and *higher-than-expected transaction costs*.

Loss of Control

Managers often complain about loss of control over their own process technologies and quality standards when specific processes or services are outsourced. The consequences can be severe. When tasks previously performed by company personnel are given to outsiders, over whom the firm has little or no control, quality may suffer, production schedules may be disrupted, or contractual disagreements may develop. If outsourcing contracts inappropriately or incorrectly detail work specifications, outsourcers may be tempted to behave opportunistically-for example, by using subcontractors or by charging unforeseen or unwarranted price increases to exploit the company's dependency. Control issues can also be exacerbated by geographic distance, particularly when the vendor is offshore. Monitoring performance and productivity can be challenging, and coordination and communication maybe difficult with offshore vendors. The inability to engage in face-to-face discussions, brainstorm, or explore nuances of obstacles could cripple a project's flow. Distance, too, can increase the likelihood of outages disabling the communication infrastructure between the vendor and the outsourcing firm. Depending on where the outsourced work is performed, there can be critical cultural or language-related differences between the outsourcing company and the vendor. Such differences can have important customer implications. For example, if customer call centers are outsourced, the manner in which an agent answers, interprets, and reacts to customer telephone calls (especially complaints) may be affected by local culture and language.

Loss of Innovation

Companies pursuing innovation strategies recognize the need to recruit and hire highly qualified individuals, provide them with a long-term focus and minimal control, and appraise their performance for positive long-run impact. When certain support services—such as IT, software development, or materials management—are outsourced, innovation may be impaired. Moreover, when external providers are hired for the purposes of cutting costs, gaining labor pool flexibility, or adjusting to market fluctuations, long-standing cooperative work patterns are interrupted, which may adversely affect the company's corporate culture.

Loss of Organizational Trust

For many firms, a significant nonquantifiable risk occurs because outsourcing, especially of services, can be perceived as a breach in the employer-employee relationship. Employees may wonder which group or what function will be the next to be outsourced. Workers displaced into an outsourced organization often feel conflicted as to who their "real" boss is: the new external service contractor or the client company by which they were previously employed?

Higher-Than-Expected Transaction Costs

Some outsourcing costs and benefits are easily identified and quantified because they are captured by the accounting system. Other costs and benefits are decision-relevant but not part of the accounting system. Such factors cannot be ignored simply because they are difficult to obtain or because they require the use of estimates. One of the most important and least understood considerations in the make-or-buy decision is the cost of outsourcing risk.

There are many other factors to consider in selecting the right level of participation in the value chain and the location for key value-added activities. Factor conditions, the presence of supporting industrial activity, the nature and location of the demand for the product, and industry rivalry should all be considered. In addition, such issues as tax consequences, the ability to repatriate profits, currency and political risk, the ability to manage and coordinate in different locations, and synergies with other elements of the company's overall strategy should be factored in.

Minicase 8.2. Nokia's Global Brain Trust: Encouraging the Mobility of Ideas⁷

Nokia likes to team up with leading international universities in search of the next great communications technology ideas. The Finnish company's research center in the United Kingdom works with the University of Cambridge to develop nanotechnologies for mobile communication and what is being called "ambient intelligence" electronic environments that are sensitive and responsive to the presence of people. In Beijing, Nokia's research hub was set up to take advantage of China's top-level universities and to gather valuable local perspectives on communications trends and market potential.

But the other aspect of Nokia's open innovation model—its abundant use of the Internet to harvest new ideas—is far less conventional. The progress of current projects is posted on company wikis. The Nokia Beta Labs website plays host to a legion of testers who provide feedback on new and potential applications. And Forum Nokia, a portal available in English, Chinese, and Japanese, gives outside developers access to resources to help them design, test, certify, market, and sell their own applications, content, services, or websites to mobile users via Nokia devices.

By encouraging the mobility of ideas across its network and then exploiting them commercially, Nokia is able to succeed with an innovation strategy that represents the best of global and local approaches. But Nokia's open-innovation thrust is by itself only part of a longterm innovation strategy aimed at supporting sustained expansion into markets outside the company's traditional European markets.

Venture capital investment is the other thrust. The company's Nokia Growth Partners, with offices in China, Finland, India, and the United States, manages \$350 million for direct investments and fundof-fund investments in other venture capital players, primarily in the United States, Europe, and Asia. One recent fund investment was in Madhouse, China's leading mobile advertisement network—a crucial driver for continued growth in mobile communications markets.

Locating Value-Added Activities

The search for *growth* is a primary driver of manufacturing relocation.⁸ Emerging economies have significantly higher trend rates of growth than mature economies. This is the inevitable result of the arrival of large-scale capital investment in low-wage and low-cost economies.

This phenomenon is clearly evident in the automotive industry an industry challenged by low sales growth and declining margins in mature markets. The world's automotive assemblers want to capture market share in the fastest growing markets of the near future, and they want their chosen suppliers to be with them. Suppliers, for their part, also want to be part of the growth story, serving not only their traditional global Original Equipment Manufacturer OEM customers but also the emerging local automakers that are capturing new markets with low cost and often innovative products, such as China's Chery Auto and India's Tata Motors.

Reducing cost is a second powerful driver of manufacturing relocation. A recent survey by KPMG Peat Marwick showed that among companies that are primarily motivated by costs to invest in new markets, the opportunity to lower *material costs is considered marginally more important than labor or capital costs.*⁹ This somewhat surprising result reflects the fact that companies still find that the costs of internationally traded raw materials and partially processed commodities, such as automotive steel, remain cheaper in some lower-cost economies. The same survey showed that even if costs can be reduced, companies remain concerned about the cost of complexity that may be introduced when operations become distributed over several locations that may be separated by large distances and may be in numerous jurisdictions. The companies interviewed also cited a wide range of other cost drivers of relocation. These include government incentives, regional interest rates, wages, and trade agreements.

The relative importance of a third driver—*innovation*—is increasing as the center of gravity of global business activity continues to shift eastward. In the automobile industry, for example, a vehicle manufactured today has, on average, 10 times the number of electronic functions of a vehicle manufactured 10 years ago. But while innovation has intensified, the sales volume to support the costs of this product innovation has failed to materialize. Price and income trends mean that sales volumes are unlikely to be rebuilt in the developed industrial markets; on the contrary, they are likely to fall further. In these markets, the average price of a new car has doubled over the last 20 years, but average incomes have only risen by 50%, and this price-income gap continues to widen, implying further falls in sales volumes if costs cannot be cut.

These trends are driving a multidirectional globalization of innovation in the supplier industry. Established companies in the automotive triad need both to cut the costs of innovation and find new sources of technology and process innovation. Suppliers in emerging economies need to acquire, rather than just develop, technologies and R&D skills in order to gain the innovation critical mass that will allow them to compete as global suppliers.

Companies participating in the KPMG's Supplier Survey divide roughly equally between those who believe that R&D should be located close to production and those who are happy with geographically separated R&D and production. These responses suggest that a minority of companies plan to relocate R&D to emerging markets, despite cost pressures.

Companies who believe that R&D should be located close to production tend not to be planning R&D relocations. They believe that R&D for process improvement is more important than R&D for application engineering, and their R&D centers are most likely to be located in Western Europe and Asia, followed by North America. In contrast, companies willing to operate R&D centers remote from production are predisposed to relocating production facilities, although most of these companies say that innovation is a less important criterion than cost, growth, or risk.

These primary drivers—the need to find growth, to reduce costs, and to facilitate innovation—must be balanced by a company's capacity to manage risks. Yet, in many cases, the upside and downside of all these factors may be more subtle or less clear than companies commonly suppose. Where markets offer the promise of *growth*, companies should consider how consistent that growth would be over the term of the investment. They might consider whether it is necessary to locate in a given economy, or even region, to access the expected growth. Where companies seek to reduce *costs*, they should also consider whether direct cost reductions in areas like labor and raw materials are accompanied by indirect cost increases in areas like logistics and quality assurance. Where companies seek to facilitate *innovation*, they should consider whether risks and costs are best balanced by a conservative strategy of centralized R&D or a radical strategy of globally distributed R&D. And, in seeking to manage *risks*, companies need to understand that globalized operations may offer risk mitigation opportunities through the hedging of production, currency exposure and raw materials sourcing, as well as the increased risk challenges inherent in global operations.

Minicase 8.3. Nestlé Adapts Its Business Model to Target the Global Halal Food Market¹⁰

In 2006, the Malaysian operations of the world's biggest food company played a leading role as Nestlé began to target the fastgrowing halal food business. Its annual turnover of \$73 billion (in 2005) dwarfed that of its nearest rivals, notably Kraft Foods, PepsiCo, Unilever, and Coca-Cola, whose sales ranged from \$20 billion to \$35 billion. Nevertheless, Nestlé was positioning itself to grow its food business even further.

With a market share of only 2% of the global food industry, Nestlé had ample room for growth. The halal segment, where it was well ahead of its major competitors in terms of market share and preparation, looked particularly promising. Worth \$150 billion and with Muslims forming about 25% of the world's population and having higher per capita income growth, Nestlé estimated that the halal food business would grow to \$500 billion by 2010. Nestlé's 2006 sales of halal products were in the region of \$6 billion.

The strategic importance of this segment of the market was clearly highlighted at Nestlé's product exhibition center on the sixth floor of its headquarters in Vevey, Switzerland. In a special corner for halal food exhibits, posters displayed such messages as "As disposable incomes of Muslim countries increase, global halal food sales will skyrocket"; "In Europe, many supermarkets are selling halal products"; and "Worldwide, halal food sales exceed \$150 billion."

Growth was expected to come from not only large, populated Muslim countries like Indonesia, Bangladesh, Pakistan, and the Middle East but also non-Muslim countries with a large number of Muslims, like India and the Muslim belt of North Africa, and in cities such as London.

There were a number of factors Nestlé believed would drive growth. One was an increasing demand for products that follow Islamic law. Another was the growing divide between the West and the Islamic world. One implication of the latter was an expected increase in trade between Muslim countries—halal food products would be strong beneficiaries. Third, Muslim governments were widely expected to launch initiatives to encourage private-sector participation in expanding the halal food business. In the case of Malaysia, for example, the government had initiated an ambitious plan to turn the country into the world's premier halal hub. Finally, the international Muslim community was getting closer to standardizing and harmonizing matters pertaining to halal food manufacturing practices, certification, and product labeling.

To capitalize on these opportunities, Nestlé was prepared to make significant changes to its business model. First, it designated its Malaysian operations to take the lead. Nestlé had begun producing halal food in Malaysia in the 1970s. That was the decade when the company established a halal committee comprising Muslim senior executives of various disciplines from the operational-factory side and the corporate level. In the 1990s, the committee became more structured, and a halal policy was established. In 1995, Nestlé Malaysia took the halal initiative to the global platform within the Nestlé Group. Two years later, Nestlé Malaysia, in collaboration with the Nestlé Group, established internal guidelines with input from Jakim (the Department of Islamic Development in Malaysia) to define what constituted halal food and how to manage its production and supply.

Second, working with the international Muslim community and governments, it had 75 of its 487 factories in 84 countries certified halal. Sixty-six were in Asia and the Middle East, seven were in Europe, and two were in the Americas. All eight of Nestlé's Malaysian factories were halal-certified, producing more than 300 products. The big items were powdered Milo beverage, Nescafé, Maggi noodles, sauces, and culinary mixes. The Malaysian operation was also the regional producer for Milo, Kit Kat chocolate, and infant cereals.

Third, at the retail level, Nestlé worked with the United Kingdom's largest supermarket chain, Tesco, to promote halal food products as a specialty category. Tesco had agreed to create halal corners in 40 stores in the United Kingdom, with the potential for expanding that number to 500 stores. Nestlé was finalizing a list of products, including those made by its Malaysian factories, to be featured in this section of the supermarket.

Finally, to help the Malaysian government reach its target, Nestlé conducted a mentoring program for small- and mediumscale enterprises in the food industry to improve their standards with regard to hygiene and food safety. All these preparations were about to pay a dividend.

Partnering

Formulating cooperative strategies—*joint ventures, strategic alliances,* and *other partnering* arrangements—is the complement of outsourcing. For many corporations, cooperative strategies capture the benefits of internal development and acquisition while avoiding the drawbacks of both.

Globalization is an important factor in the rise of cooperative ventures. In a global competitive environment, going it alone often means taking extraordinary risks. Escalating fixed costs associated with achieving global market coverage, keeping up with the latest technology, and increased exposure to currency and political risk all make risk-sharing a necessity in many industries. For many companies, a global strategic posture without alliances would be untenable.

Cooperative strategies take many forms and are considered for many different reasons. However, the fundamental motivation in every case is the corporation's ability to spread its investments over a range of options, each with a different risk profile. Essentially, the corporation is trading off the likelihood of a major payoff against the ability to optimize its investments by betting on multiple options. The key drivers that attract executives to cooperative strategies include the need for *risk sharing*, the corporation's *funding limitations*, and the *desire to gain market* and *technology access.*¹¹

Risk Sharing

Most companies cannot afford "bet-the-company" moves to participate in all product markets of strategic interest. Whether a corporation is considering entry into a global market or investments in new technologies, the dominant logic dictates that companies prioritize their strategic interests and balance them according to risk.

Funding Limitations

Historically, many companies focused on building sustainable advantage by establishing dominance in *all* the business's value-creating activities. Through cumulative investment and vertical integration, they attempted to build barriers to entry that were hard to penetrate. However, as the globalization of the business environment accelerated and the technology race intensified, such a strategic posture became increasingly difficult to sustain. Going it alone is no longer practical in many industries. To compete in the global arena, companies must incur immense fixed costs with a shorter payback period and at a higher level of risk.

Market Access

Companies usually recognize their lack of prerequisite knowledge, infrastructure, or critical relationships necessary for the distribution of their products to new customers. Cooperative strategies can help them fill the gaps. For example, Hitachi has an alliance with Deere & Company in North America and with Fiat Allis in Europe to distribute its hydraulic excavators. This arrangement makes sense because Hitachi's product line is too narrow to justify a separate distribution network. What is more, customers benefit because the gaps in its product line are filled with quality products such as bulldozers and wheel loaders from its alliance partners.

Technology Access

A large number of products rely on so many different technologies that few companies can afford to remain at the forefront of all of them. Carmakers increasingly rely on advances in electronics, application software developers depend on new features delivered by Microsoft in its nextgeneration operating platform, and advertising agencies need more and more sophisticated tracking data to formulate schedules for clients. At the same time, the pace at which technology is spreading globally is increasing, making time an even more critical variable in developing and sustaining competitive advantage. It is usually beyond the capabilities, resources, and good luck in R&D of any corporation to garner the technological advantage needed to independently create disruption in the marketplace. Therefore, partnering with technologically compatible companies to achieve the prerequisite level of excellence is often essential. The implementation of such strategies, in turn, increases the speed at which technology diffuses around the world.

Other Factors

Other reasons to pursue a cooperative strategy are a lack of particular *management skills*; an *inability to add* value in-house; and a *lack of acquisition opportunities* because of size, geographical, or ownership restrictions.

The airline industry provides a good example of some of the drivers and issues involved in forging strategic alliances. Although the U.S. industry has been deregulated for some time, international aviation remains controlled by a host of bilateral agreements that smack of protectionism. Outdated limits on foreign ownership further distort natural market forces toward a more global industry posture. As a consequence, airline companies have been forced to confront the challenges of global competition in other ways. With takeovers and mergers blocked, they have formed all kinds of alliances—from code sharing to aircraft maintenance to frequent flyer plans.

Cooperative strategies cover a wide spectrum of nonequity, crossequity, and shared-equity arrangements. Selecting the most appropriate arrangement involves analyzing the nature of the opportunity, the mutual strategic interests in the cooperative venture, and prior experience with joint ventures of both partners. The essential question is, how can this opportunity be structured in order to maximize benefit(s) to both parties?

The Boston Consulting Group (BSC) divides alliances into four groups on the basis of whether the participants are competitors or not and on the relative depth and breadth of the alliance itself: *expertise alliances, new business alliances, cooperative alliances, and merger and acquisition M&A-like alliances.*

Expertise alliances typically bring together noncompeting firms to share expertise and specific capabilities. Outsourcing of IT services provides a good example. *New business alliances* are partnerships focused on entering a new business or market. Many companies, for example, have partnered when venturing into new parts of the world, such as China. *Cooperative alliances* are joint efforts by competing firms, formed to attain critical mass or economies of scale. Competitors combining to seek cheaper health insurance for employees, for example, or combined purchasing arrangements, illustrate this kind of alliance. *M&A-like alliances*—as the name implies—focus on near-complete integration but may be prevented from doing so, either because of legal regulatory constraints (e.g., airline industry) or because of unfavorable stock market conditions.

BCG found that while *new-business* alliances compose a clear majority (over 50%), *expertise-based* alliances are most favored by the stock market, and *M&A-like* alliances are least favored. The latter is not surprising since such alliances are created in response to unfavorable regulatory or market conditions.¹²

Minicase 8.4. May 2009: The Air France/KLM Group and Delta Air Lines Launch New Transatlantic Global Joint Venture¹³

The Air France KLM Group and Delta Air Lines announced a new, long-term joint venture whereby the partners will jointly operate their transatlantic business by coordinating operations and sharing revenues and costs of their transatlantic-route network. The airlines will cooperate on routes between North America and Africa, the Middle East and India, as well as on flights between Europe and several countries in Latin America. For customers, this joint venture will result in more choices, frequencies, convenient flight schedules, competitive fares, and harmonized services on all transatlantic flights operated by the partners. The joint venture represents approximately 25% of total transatlantic capacity, with annual revenues estimated at more than \$12 billion (approximately 9.3 billion euros, reference year 2008–2009).

Global passengers will be able to access a vast network offering over 200 flights and approximately 50,000 seats daily. That network is structured around six main hubs: Amsterdam, Atlanta, Detroit, Minneapolis, New York-JFK, and Paris-CDG, together with Cincinnati, Lyon, Memphis, and Salt Lake City. The airline partners will provide their corporate clients with a broad global offering that best meets their expectations for the most convenient airline system, while providing efficient account management as well as ease of travel for their clients. Going forward, this structure will represent a major strength for the SkyTeam alliance, of which all three airlines are members.

The joint venture's geographic scope includes all flights between North America and Europe, between Amsterdam and India, and between North America and Tahiti. On these routes, the business will be jointly operated, with the strategy and economics equally shared among the Air France-KLM Group and Delta.

Air France and KLM have been working with their respective American partners for many years. KLM signed a joint venture agreement with Northwest in 1997, while Air France and Delta signed a joint-venture agreement in 2007. Following the merger of Delta and Northwest, the next logical business strategy was to establish a single transatlantic joint venture. The agreement is the result of that collaboration.

Governance of the joint venture will be equally shared between the Air France KLM Group and Delta. An executive committee comprising the three CEOs and a management committee comprising representatives from marketing, network, sales, alliances, finance, and operations will define strategy. Ten working groups will be responsible for implementing and managing the agreement in the sectors of network, revenue management, sales, product, frequent flyer, advertising and brand, cargo, operations, IT, and finance. The joint venture will not lead to the creation of a subsidiary.

The venture is a long-term, evergreen arrangement that can only be canceled with a three-year notice and after an initial term of 10 years.

Minicase 8.5. GE Money Announces Joint Venture With One of Colombia's Largest Banking Groups¹⁴

Stamford, Connecticut, February 28, 2007: Furthering its growth strategy in Latin America, GE Money, the consumer lending unit of General Electric Company, today announced that it would acquire a minority position in Banco Colpatria-Red Multibanca Colpatria S.A.—a consumer and commercial bank based in Bogota, Colombia. GE Money will acquire a 39.3% stake in Red Multibanca Colpatria in two installments, with options to acquire up to an additional 25% stake from Mercantil Colpatria S.A. by 2012. The initial purchase, subject to regulatory approvals, is expected to close within the next few months. "We are excited to be entering Colombia to partner with Banco Colpatria and its customers," said the president and CEO of GE Money, Americas. "Colombia is an important growth market for GE as we continue to expand our business in Latin America. The Banco Colpatria team has built an exciting bank in Colombia. We look forward to partnering with them to help accelerate their growth."

Banco Colpatria, a member of the Mercantil Colpatria S.A. group, had over \$2.4 billion in assets and was the second-largest credit card issuer in Colombia. With 139 branches, the bank served more than 1 million customers. The new partnership positioned the two companies to deliver enhanced consumer credit products to the growing Colombian financial services market. "This partnership will enable Banco Colpatria to expand its product offerings and to further accelerate the bank's strong growth in the Colombian market," said the chairman of the board of Banco Colpatria. "This is part of the vision that we share with our new partner. GE Money is the perfect partner to help us broaden our business in Colombia."

GE Money, Latin America, began operations in 2000, offering consumer loans and private-label credit cards. The business now operates in Mexico, Argentina, and Brazil, as well as in Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, through a joint venture with BAC-Credomatic Holding Co., Ltd. (BAC). With approximately \$7 billion in assets, GE Money, Latin America, offers a wide range of financial products, including mortgages, auto loans, credit cards, insurance products, and personal loans in more than 430 branches and locations.

Points to Remember

- Globalizing a company's value creation infrastructure—from the sourcing of raw materials and components to manufacturing and R&D to distribution and customer service—has three primary dimensions: (a) deciding which activities to perform in house and which ones to outsource, to whom and where; (b) developing the right partnerships to support a company's globalization efforts, and (c) implementing a suitable supply-chain management model for integrating them into a cost-effective, seamless, value-creating network.
- Core competencies represent unique capabilities that allow a company to build a competitive advantage. Experience shows that only a few companies have the resources to develop more than a handful of core competencies. Picking the right ones, therefore, is the key.
- 3. Few companies, especially ones with a global presence, are selfsufficient in all the activities that make up their value chain. Growing global competitive pressures force companies to focus on those activities that they judge critical to their success and excel at—core capabilities in which they have a distinct competitive

advantage—and that can be leveraged across geographies and lines of business. Which activities should be kept in house and which ones can effectively be outsourced depends on a host of factors, most prominently the nature of the company's core strategy and dominant value discipline.

- 4. Outsourcing and offshoring of component manufacturing and support services can offer compelling strategic and financial advantages including *lower costs, greater flexibility, enhanced expertise, greater discipline,* and *the freedom to focus on core business activities.*
- 5. In the last 20 years, companies have outsourced many activities, including manufacturing, back-office functions, IT services, and customer support. Now the focus is shifting to more knowledge-intensive areas, such as product development, research and development, engineering, and analytical services.
- 6. Outsourcing can have significant benefits but is not without risk. Some risks, such as potentially higher offshoring costs due to the eroding value of the U.S. dollar, can be anticipated and addressed through contracts by employing financial hedging strategies. Others, however, are harder to anticipate or deal with. Risks associated with outsourcing typically fall into four general categories: *loss of control, loss of innovation, loss of organizational trust,* and *higher-thanexpected transaction costs.*
- 7. The search for *growth* is a primary driver of manufacturing relocation. Others include *cutting costs and innovation*.
- 8. Formulating cooperative strategies—*joint ventures, strategic alliances, and other partnering* arrangements—is the complement of outsourcing. For many corporations, cooperative strategies capture the benefits of internal development and acquisition while avoiding the drawbacks of both.
- 9. The key drivers that attract executives to cooperative strategies include the need for *risk sharing*, the corporation's *funding limita-tions*, and the *desire to gain market* and *technology access*.
- 10. The Boston Consulting Group divides alliances into four groups on the basis of whether the participants are competitors or not and on the relative depth and breadth of the alliance itself: *expertise alliances, new business alliances, cooperative alliances,* and M&A-like alliances.

184 FUNDAMENTALS OF GLOBAL STRATEGY

11. BCG found that while *new-business* alliances compose a clear majority (over 50%), *expertise-based* alliances are most favored by the stock market, and *M&A-like* alliances are least favored. The latter is not surprising since such alliances are created in response to unfavorable regulatory or market conditions.