

# Chapter 14

## Products and Services for Businesses



### CHAPTER OUTLINE

Global Perspective: Intel, the Boom, and the Inescapable Bust

Demand in Global Business-to-Business Markets

- The Volatility of Industrial Demand
- Stages of Economic Development
- Technology and Market Demand

Quality and Global Standards

- Quality Is Defined by the Buyer
- ISO 9000 Certification: An International Standard of Quality

Business Services

- After-Sale Services
- Other Business Services

Trade Shows: A Crucial Part of Business-to-Business Marketing

Relationship Marketing in Business-to-Business Contexts

### CHAPTER LEARNING OBJECTIVES

What you should learn from Chapter 14:

- LO1** The importance of derived demand in industrial markets
- LO2** How demand is affected by technology levels
- LO3** Characteristics of an industrial product
- LO4** The importance of ISO 9000 certification
- LO5** The growth of business services and nuances of their marketing
- LO6** The importance of trade shows in promoting industrial goods
- LO7** The importance of relationship marketing for industrial products and services

## Global Perspective

### INTEL, THE BOOM, AND THE INESCAPABLE BUST

This is what we wrote here in the 1999 edition of this book:

*Fortune's* cover story, "Intel, Andy Grove's Amazing Profit Machine—and His Plan for Five More Years of Explosive Growth" is capped only by *Time's* Man of the Year story, "Intel's Andy Grove, His Microchips Have Changed the World—and Its Economy." 1997 was the eighth consecutive year of record revenue (\$25.1 billion) and earnings (\$6.5 billion) for the company Grove helped found. Yet at the beginning of 1998 the real question was, Will the world change Intel? Judging from Intel's own forecasts for a flat first quarter in 1998, Chairman of the Board Grove and his associates were concerned that the financial meltdown in Asian markets would affect Intel's plans for "five more years of explosive growth." Some 30 percent of the firm's record 1997 revenues had come from Asian markets. Indeed, one pundit had earlier predicted, "I see no clear technology threats. The biggest long-term threat to Intel is that the market growth slows." Others warned there's something wrong out there: computer-industry overcapacity.

Actually Intel had an even longer list of threats all posted as a disclaimer to its published forecast: "Other factors that could cause actual results to differ materially are the following: business and economic conditions, and growth in the computing industry in various geographic regions; changes in customer order patterns, including changes in customer and channel inventory levels, and seasonal PC buying patterns; changes in the mixes of microprocessor types and speeds, motherboards, purchased components and other products; competitive factors, such as rival chip architectures and manufacturing technologies, competing software-compatible microprocessors and acceptance of new products in specific market segments; pricing pressures; changes in end users' preferences; risk of inventory obsolescence and variations in inventory valuation; timing of software industry product introductions; continued success in technological advances, including development, implementation and initial production of new strategic products and processes in

a cost-effective manner; execution of manufacturing ramp; excess storage of manufacturing capacity; the ability to successfully integrate any acquired businesses, enter new market segments and manage growth of such businesses; unanticipated costs or other adverse effects associated with processors and other products containing errata; risks associated with foreign operations; litigation involving intellectual property and consumer issues; and other risk factors listed from time to time in the company's SEC reports."

*Time's* Man of the Year had a lot to worry about—most of all that industrial market booms are always followed by busts. Will the rise truly last five more years?

How is it that the brilliant Mr. Grove didn't see the inescapable bust coming? Hadn't he been in this cyclic business from the beginning? His boom did last, another three and a half years beyond his 1997 prediction, not five. And the bust was an ugly thing. Sales revenues declined by more than 20 percent during 2001, the stock price crashed from a high of \$75 a share to below \$20, shedding 80 percent of the company's value along the way, and 11,000 layoffs were announced. Ouch! The lesson here is a simple one: In industrial markets, including the global ones, what goes up must come down!

You may recall from Chapter 13 (Exhibit 13.2) that Intel had problems again in 2009—a \$1.45 billion EU antitrust fine, and declining brand equity again. We do applaud its strategic moves into smartphones and computers though. If successful, this diversification will spread its portfolio of products and markets and yield more stability in its revenues.

Sources: David Kirkpatrick, "Intel Andy Grove's Amazing Profit Machine—And His Plan for Five More Years of Explosive Growth," *Fortune*, February 17, 1997, pp. 60–75; "Man of the Year," *Time*, January 5, 1998, pp. 46–99; Peter Burrow, Gary McWilliams, Paul C. Judge, and Roger O. Crockett, "There's Something Wrong Out There," *BusinessWeek*, December 29, 1997, pp. 38–49; Stephanie Clifford, "A Tech Company's Campaign to Burnish Its Brand," *The New York Times*, May 5, 2009, online.

Although everyone likely is familiar with most of the consumer brands described in Chapter 13, sales of such products and services do not constitute the majority of export sales for industrialized countries. Take the United States, for example. As can be seen in Exhibit 14.1, the main product the country sells for international consumption is *technology*. This dominance is reflected in categories such as capital goods and industrial supplies, which together account for some 44 percent of all U.S. exports of goods and services.<sup>1</sup> Technology exports are represented by both the smallest and the largest products—semiconductors and commercial aircraft, the latter prominently including America's export champions, Boeing's 747s. Two of the three most valuable companies in the world at this writing—Microsoft and General Electric—are sellers of high-technology industrial products.

The issues of standardization versus adaptation discussed in Chapter 13 have less relevance to marketing industrial goods than consumer goods because there are more similarities in marketing products and services to businesses across country markets than there are differences. The inherent nature of industrial goods and the sameness in motives and behavior among businesses as customers create a market where product and marketing mix standardization are commonplace. Photocopy machines are sold in Belarus for the same reasons as in Belgium: to make photocopies. Some minor modification may be necessary to accommodate different electrical power supplies or paper size, but basically, photocopy machines are standardized across markets, as are the vast majority of industrial goods. For

<sup>1</sup>Internet jargon seems to be morphing the manager's lexicon toward B2B and B2C distinctions (that is, business-to-business and business-to-consumer) and away from the traditional industrial and consumer goods distinctions. International trade statistics, categories, and descriptors have not kept up with these changes. Consequently, we use the adjectives *industrial* and *business-to-business* interchangeably in this book.

### Exhibit 14.1

#### Major Categories of U.S. Exports

Source: U.S. Department of Commerce, <http://www.doc.gov>, 2010.

Category	Percentage
Services total	32.6%
Travel (hotels, etc.)	5.1
Passenger fares	1.7
Other transportation (freight and port services)	5.0
Royalties and Licenses	5.3
Private Services*	14.8
• Commercial, professional, and technical services (advertising, accounting, legal, construction, engineering)	
• Healthcare	
• Financial services (banking and insurance)	
• Education and training services (mostly foreign student tuition)	
• Entertainment (movies, books, records)	
• Telecommunications	
[* The Commerce Department no longer breaks out the statistics by the Private Services categories. They are listed here in the order of their historical percentages, first being highest.]	
Merchandise total	67.4
Foods, feeds, and beverages (wheat, fruit, meat)	6.1
Industrial supplies (crude oil, plastics, chemicals, metals)	19.1
Capital goods (construction equipment, aircraft, computers, telecommunications)	25.1
Automotive vehicles, engines, and parts	5.3
Consumer goods (pharmaceuticals, tobacco, toys, clothing)	9.7
Other categories	2.9

Note: The United States exports approximately \$1.5 trillion worth of services and goods each year. Services exports are the more understated, so these percentages are only reasonable approximations of the importance of each category listed. Each U.S. Commerce Department category comprises many kinds of products or services, including (but certainly not limited to) those listed in parentheses.

## CROSSING BORDERS 14.1

### Trade Statistics Don't Tell the Whole Story

One reason U.S. manufacturers don't trumpet their export successes is that large companies no longer distinguish carefully between sales to Texas and those to Thailand. The totals could be worked up, but why bother? It's one world, after all. Besides, it's incredibly complicated in some cases to determine the net contribution a manufacturer makes to the U.S. balance of trade. Lucent Technologies' Microelectronics Group, which exports half of what it makes to customers in Europe and Asia, is an extreme example. A wafer of Lucent's integrated circuits is often designed at its laboratories

in England or China; made in its plants in Pennsylvania, Florida, or Ireland; then shipped to Bangkok to be tested, diced, and packaged. After that the finished chips might move on to Germany to be used by Siemens in telecommunications equipment that, in turn, is shipped to Bell-South and installed in Charlotte, North Carolina.

Sources: Philip Siekman, "Industrial Management & Technology/Export Winners," *Fortune*, January 10, 2000, pp. 154–63; "Lucent CEO Sees China as Important Growth Area for Global Business," *Xinhua News Agency*, August 19, 2005; John Collins, "Buying in Ideas Gives Irish Firms License to Stay Ahead," *Irish Times*, September 9, 2005, p. 6.

industrial products that are basically custom made (specialized steel, customized machine tools, and so on), adaptation takes place for domestic as well as foreign markets.

Two basic factors account for greater market similarities among industrial goods customers than among consumer goods customers. First is the inherent nature of the product: Industrial products and services are used in the process of creating other goods and services; consumer goods are in their final form and are consumed by individuals. Second, the motive or intent of the users differ: Industrial consumers are seeking profit, whereas the ultimate consumer is seeking satisfaction. These factors are manifest in specific buying patterns and demand characteristics and in a special emphasis on relationship marketing as a competitive tool. Whether a company is marketing at home or abroad, the differences between business-to-business and consumer markets merit special consideration.

Along with industrial goods, business services are a highly competitive growth market seeking quality and value. Manufactured products generally come to mind when we think of international trade. Yet the most rapidly growing sector of U.S. international trade today consists of business services—accounting, advertising, banking, consulting, construction, hotels, insurance, law, transportation, and travel sold by U.S. firms in global markets. The intangibility of services creates a set of unique problems to which the service provider must respond. A further complication is a lack of uniform laws that regulate market entry. Protectionism, though prevalent for industrial goods, can be much more pronounced for the service provider.

This chapter discusses the special problems in marketing goods and services to businesses internationally, the increased competition and demand for quality in those goods and services, and the implications for the global marketer.

## Demand in Global Business-to-Business Markets

Gauging demand in industrial markets can involve some huge bets. Shanghai's 30-kilometer, \$1.2 billion bullet train line is one example. This product of a Sino-German joint venture was really a prototype for fast things to come in mass transit-dependent China. Indeed, China now has the longest (1,339 miles) and fastest (267 mph) high-speed rail service in the world with the help of \$58 billion in German subsidies. Another big bet that went bad was Iridium LLC; its 72-satellite, \$5 billion communications system was unable to sell the associated phones. Iridium badly miscalculated demand for its approach to global telecommunications and was sold in bankruptcy for \$25 million. The system remains operational with the U.S. Department of Defence as its primary customer. Most recently, however, Iridium is making a bit of a comeback. It raised \$200 million in an IPO in late 2009 to help it build on its successes

**LO1**

The importance of derived demand in industrial markets

**The Volatility of Industrial Demand**

Servers are sold to companies; thus, the demand for them is more volatile than the demand for personal computers being sold to individual consumers. Here Microsoft acknowledges the technology bust of 2000 in its ads for servers in both the United States and Japan. In both countries, the pressure was on CIOs to “do more with less.” Executives faced “larger projects” and “shrinking budgets.” The American executive is working late; everyone else has gone home. The focus on the Japanese individual executive may look odd to older, more collectivistic Japanese managers. However, Microsoft acknowledged that things were changing in Japan—particularly, information technology decisions were more focused and less consensus-oriented. Younger Japanese will like the independence reflected in the image. Finally, do you think it’s a coincidence that both executives are standing near windows?

with machine-to-machine (M2M) commercial subscribers that need coverage in the 90 percent of the planet where mobile phone service does not exist.<sup>2</sup>

Three factors seem to affect the demand in international industrial markets differently than in consumer markets. First, demand in industrial markets is by nature more volatile. Second, stages of industrial and economic development affect demand for industrial products. Third, the level of technology of products and services makes their sale more appropriate for some countries than others.

Consumer products firms have numerous reasons to market internationally—gaining exposure to more customers, keeping up with the competition, extending product life cycles, and growing sales and profits, to name a few. Firms producing products and services for



<sup>2</sup>Arik Hesseldahl, “The Second Coming of Iridium,” *BusinessWeek*, October 29, 2009, p. 29.



A more recent global campaign for Microsoft B2B products mentions nothing about the IT bust and uses the universal slogan “Your potential. Our passion” for both the Mexican and German markets, as in the United States.

industrial markets have an additional crucial reason for venturing abroad: dampening the natural volatility of industrial markets. Indeed, perhaps the single most important difference between consumer and industrial marketing is the huge, cyclical swings in demand inherent in the latter. It is true that demand for consumer durables such as cars, furniture, or home computers can be quite volatile. In industrial markets, however, two other factors come into play that exacerbate both the ups and downs in demand: Professional buyers tend to act in concert, and derived demand accelerates changes in markets.<sup>3</sup>

Purchasing agents at large personal computer manufacturers such as IBM, Apple, Acer, Samsung, and Toshiba are responsible for obtaining component parts for their firms as cheaply as possible and in a timely manner. They monitor demand for PCs and prices of components such as microprocessors or disk drives, and changes in either customer markets or supplier prices directly affect their ordering. Declines in PC demand or supplier prices can cause these professionals to slam on the brakes in their buying; in the latter case, they wait for further price cuts. And because the purchasing agents at all the PC companies, here and abroad, are monitoring the same data, they all brake (or accelerate) simultaneously. This is exactly what happened in 2008 in the \$14 billion global seaweed market. Certain types of seaweed are used in toothpaste, cosmetics, and chicken patties, and the volatility in industrial demand pushed prices from \$0.50/kilogram to \$1.80/kilogram and then to \$1.00/kilogram, all in three months.<sup>4</sup> Consumers monitor markets as well, but not nearly to the same degree. Purchases of cola, clothing, and cars tend to be steadier.

<sup>3</sup>Ilan Brat, “Crane Migration Hinders Builders,” *The Wall Street Journal*, June 18, 2007, pp. B1, B2.

<sup>4</sup>Patrick Barta, “Indonesia Got Soaked When the Seaweed Bubble Burst,” *The Wall Street Journal*, October 21, 2008, online.

**Exhibit 14.2**

## Derived Demand Example

Time Period	Consumer Demand for Premolded Fiberglass Shower Stalls			Number of Machines in Use to Produce the Shower Stalls			Demand for the Machines		
	Previous Year	Current Year	Net Change	Previous Year	Current Year	Net Change	Replacement	New	Total
1	100,000	100,000	—	500	500	—	50	—	50
2	100,000	110,000	+10,000	500	550	+50	50	50	100
3	110,000	115,000	+5,000	550	575	+25	50	25	75
4	115,000	118,000	+3,000	575	590	+15	50	15	65
5	118,000	100,000	−18,000	590	500	−90	—	−40	−40
6	100,000	100,000	—	500	500	—	10	—	10

Source: Adapted from R. L. Vaile, E. T. Grether, and R. Cox, *Marketing in the American Economy* (New York: Ronald Press, 1952), p. 16. Appears in Robert W. Haas, *Business Marketing*, 6th ed. (Cincinnati, OH: Southwestern, 1995), p. 115.

For managers selling capital equipment and big-ticket industrial services, understanding the concept of derived demand is absolutely fundamental to their success. **Derived demand** can be defined as demand dependent on another source. Thus, the demand for Boeing 747s is derived from the worldwide consumer demand for air travel services, and the demand for Fluor Corp's global construction and engineering services to design and build oil refineries in China is derived from Chinese consumers' demands for gasoline. Minor changes in consumer demand mean major changes in the related industrial demand. In the example in Exhibit 14.2, a 10 percent increase in consumer demand for shower stalls in year 2 translates into a 100 percent increase in demand for the machines to make shower stalls. The 15 percent decline in consumer demand in year 5 results in a complete shutdown of demand for shower-stall-making machines. For Boeing, the September 11 terrorist attacks, the continuing threat of more of the same, and the subsequent armed conflicts in the Middle East combined to dramatically reduce air travel (both vacation and commercial) worldwide, which in turn caused cancellations of orders for aircraft. Moreover, the airlines not only canceled orders, they also mothballed parts of their current fleets. During August 2003, there were 310 jetliners stored in a Mojave Desert facility awaiting demand to pick up again. The commercial aircraft industry has always been and will continue to be one of the most volatile of all.

Industrial firms can take several measures to manage this inherent volatility, such as maintaining broad product lines<sup>5</sup> and broad market coverage,<sup>6</sup> raising prices faster and reducing advertising expenditures during booms, ignoring market share as a strategic goal, eschewing layoffs,<sup>7</sup> and focusing on stability. For most American firms, where corporate cultures emphasize beating competitors, such stabilizing measures are usually given only lip service. Conversely, German and Japanese firms value employees and stability more highly and are generally better at managing volatility in markets.<sup>8</sup>

Some U.S. companies, such as Microsoft and especially General Electric,<sup>9</sup> have been quite good at spreading their portfolio of markets served. Late-1990s declines in Asian markets

<sup>5</sup>Nelson D. Schwartz, "Is G.E. Too Big for Its Own Good?" *The New York Times*, July 22, 2007, pp. 3-1, 3-8.

<sup>6</sup>Ilan Brat and Bryan Gruley, "Global Trade Galvanizes Caterpillar," *The Wall Street Journal*, February 26, 2007, pp. B1, B7.

<sup>7</sup>Southwest Airlines management, unlike almost all its competitors, has avoided layoffs during the recent bust in the industry. Refusing to make layoffs has been a founding principle of the organization. "Southwest Airlines December Traffic Rose 4%," *Dow Jones News Service*, January 4, 2008.

<sup>8</sup>Cathy Anterasian, John L. Graham, and R. Bruce Money, "Are American Managers Superstitious about Market Share?" *Sloan Management Review*, Summer 1996, pp. 667-77; John L. Graham, "Culture and Human Resources Management," Chapter 18 in Alan Rugman and Thomas L. Brewer (eds.), *The Oxford Handbook of International Business*, 2nd ed. (Oxford: Oxford University Press, 2008); Rajiv Srinivasan, Arvind Rangaswamy, and Gary L. Lilien, "Turning Adversity into Advantage: Does Proactive Marketing During a Recession Pay Off?" *International Journal of Research in Marketing* 22, no. 2 (2005), pp. 109-25.

<sup>9</sup>Claudia H. Deutsch, "[G.E.] At Home in the World," *The New York Times*, February 14, 2008, pp. C1, C4.

were somewhat offset by strong American markets, just as late-1980s increases in Japanese demand had offset declines in the United States. Indeed, one of the strange disadvantages of having the previously command economies go private is their integration into the global market. That is, prior to the breakup of the USSR, Soviets bought industrial products according to a national five-year plan that often had little to do with markets outside of the communist bloc. Their off-cycle ordering tended to dampen demand volatility for companies able to sell there. Now, privately held Russian manufacturers watch and react to world markets just as their counterparts do all over the globe. The increasing globalization of markets will tend to increase the volatility in industrial markets as purchasing agents around the world act with even greater simultaneity. Managing this inherent volatility will necessarily affect all aspects of the marketing mix, including product/service development.

## Stages of Economic Development

Perhaps the most significant environmental factor affecting the international market for industrial goods and services is the degree of industrialization. Although generalizing about countries is almost always imprudent, the degree of economic development can be used as a rough measure of a country's industrial market. Rostow's<sup>10</sup> five-stage model of economic development is useful here; demand for industrial products and services can be classified correspondingly.

**Stage 1** (*the traditional society*). The most important industrial demand will be associated with natural resources extraction—think parts of Africa and the Middle East.

**Stage 2** (*preconditions for takeoff*). Manufacturing is beginning. Primary needs will be related to infrastructure development<sup>11</sup>—for example, telecommunications, construction, and power generation equipment and expertise. Vietnam would fit this category.

**Stage 3** (*takeoff*). Manufacturing of both semidurable and nondurable consumer goods has begun. Goods demanded relate to equipment and supplies to support manufacturing. Russian and Eastern European countries fit this category.

**Stage 4** (*drive to maturity*). These are industrialized economies such as Korea and the Czech Republic. Their focus is more on low-cost manufacturing of a variety of consumer and some industrial goods. They buy from all categories of industrial products and services.

**Stage 5** (*the age of mass consumption*). These are countries where design activities are going on and manufacturing techniques are being developed, and they are mostly service economies. Japan and Germany are obvious examples of countries that purchase the highest-technology products and services, mostly from other Stage 5 suppliers and consumer products from Stage 3 and 4 countries.

## Technology and Market Demand

### LO2

How demand is affected by technology levels

Another important approach to grouping countries is on the basis of their ability to benefit from and use technology, particularly now that countries are using technology as economic leverage to leap several stages of economic development in a very short time.<sup>12</sup> Perhaps the best indicator of this dimension of development is the quality of the educational system. Despite relatively low levels of per capita GDP, many countries (e.g., China, the Czech Republic, Russia) place great emphasis on education, which affords them the potential to leverage the technology that is transferred.

Not only is technology the key to economic growth, but for many products, it is also the competitive edge in today's global markets. As precision robots and digital control systems take over the factory floor, manufacturing is becoming more science oriented, and access to inexpensive labor and raw materials is becoming less important. The ability to develop the latest information technology and to benefit from its application is a critical factor in the

<sup>10</sup>Walt W. Rostow, *The Stages of Economic Growth*, 2nd ed. (London: Cambridge University Press, 1971).

<sup>11</sup>Anita Chang, "China: Three Gorges Dam Impact Not That Bad," *Associated Press Newswires*, November 22, 2007.

<sup>12</sup>Bruce Einhorn, "The Tech Dragon Stumbles," *BusinessWeek*, May 14, 2007, pp. 44–45.



## CROSSING BORDERS 14.2

### The Military–Consumer Complex? Sony Sells to the Military

The earliest computers were used to crack codes and simulate nuclear explosions. The Internet grew out of a military research project. In-car navigation systems rely on satellites that were put into orbit to guide ships, troops, and missiles. The Boeing 747, with its raised cockpit, was designed as a military transporter. In each case, a technology created for military use has gone on to become widely used by civilians. That this happens so often is not surprising: The military is, after all, a deep-pocketed customer prepared to fund the development of expensive new technologies. As gizmos become smaller and cheaper—and they invariably do—they are able to percolate from the soldier on the battlefield to the man in the street.

But lately some kinds of technology have been moving in the other direction too. The United States Air Force has just placed an order for 2,200 Sony PlayStation 3 videogame consoles, which will be the building blocks of a supercomputer. Soldiers in Iraq and Afghanistan are using Apple iPods and iPhones to run translation software and calculate bullet trajectories. Xbox videogame controllers have been modified to control reconnaissance robots and drone aircraft. Graphics chips that power PC video cards are being used by defense firms to run simulations.

What has caused this shift? Global defense spending, at about \$1.5 trillion a year, far exceeds sales of consumer electronics, at around \$700 billion a year. But only a small fraction of defense spending is devoted to developing electronics. The consumer electronics industry can therefore outspend the military in research and development and spread out those costs over a

far larger market: more than 1 billion mobile phones are sold every year, for example. Electronics firms also move much faster than the slow, multiyear grind of military procurement programs, with few products remaining on the market for more than a year before being replaced by something better or cheaper. And the emergence of open standards and open-source software makes it easier to repurpose off-the-shelf technologies or combine them in novel ways. (All those PlayStation 3s will have a customized version of Linux, an open-source operating system, installed on them and will be wired up using Gigabit Ethernet, the networking technology commonly used in offices.)

All this is to be applauded. Where consumer technology can be used, it is much cheaper and quicker to do so. The Air Force's new supercomputer will cost around one-tenth as much as a conventional supercomputer of equivalent power. Using an iPod to run translation software in Iraq makes much more sense than designing and building a dedicated device. America's armed forces are also using commercially available green technologies to reduce their demand for fuel. Of course, there are limits to this off-the-shelf approach: It is no way to procure tanks, helicopters, or missile systems. But the selective use of existing technology allows military planners to focus their spending on the development of new technologies, rather than reinventing the wheel. The consumer electronics industry has been taking advantage of military innovations for years. It seems only fitting that it should now return the favor.

Source: "The Military-Consumer Complex," *The Economist*, December 12, 2009, p. 16.

international competitiveness of managers, countries, and companies. Three interrelated trends spur demand for technologically advanced products: (1) expanding economic and industrial growth in Asia, particularly China and India; (2) the disintegration of the Soviet empire; and (3) the privatization of government-owned industries worldwide.

Beginning with Japan, many Asian countries have been in a state of rapid economic growth over the last 30 years. Although this growth has recently slowed, the long-term outlook for these countries remains excellent. Japan has become the most advanced industrialized country in the region, while South Korea, Hong Kong, Singapore, and Taiwan<sup>13</sup> (the "Four Tigers") have successfully moved from being cheap labor sources to becoming industrialized nations. China and the Southeast Asian countries of Malaysia, Thailand, Indonesia, and the Philippines are exporters of manufactured products to Japan and the United States now, and since overcoming most of their 1990s financial problems, they are continuing to gear up for greater industrialization. Countries at each of the first three levels of industrial development demand technologically advanced products for further industrialization, which will enable them to compete in global markets.

<sup>13</sup>Bruce Einhorn, "A Juggernaut in Electronics," *BusinessWeek*, June 18, 2007, p. 46.

As a market economy develops in the Commonwealth of Independent States (CIS, former republics of the USSR) and other eastern European countries, new privately owned businesses will create a demand for the latest technology to revitalize and expand manufacturing facilities. These countries will demand the latest technology to expand their industrial bases and build modern infrastructures.

Concurrent with the fall of communism, which fueled the rush to privatization in eastern Europe, Latin Americans began to dismantle their state-run industries in hopes of reviving their economies. Mexico, Argentina, and Brazil are leading the rest of Latin America in privatizing state-owned businesses. The move to privatization is creating enormous demand for industrial goods as new owners invest heavily in the latest technology. Telmex, a \$4 billion joint venture between Southwestern Bell, France Telecom, and Teléfonos de Mexico, invested hundreds of millions of dollars to bring the Mexican telephone system up to the most advanced standards. Telmex is only one of scores of new privatized companies from Poland to Paraguay that are creating a mass market for the most advanced technology.

The fast economic growth in Asia, the creation of market economies in eastern Europe and the republics of the former Soviet Union, and the privatization of state-owned enterprises in Latin America and elsewhere will create expanding demand, particularly for industrial goods and business services, well into the 21st century. The competition to meet this global demand will be stiff; the companies with the competitive edge will be those whose products are technologically advanced, of the highest quality, and accompanied by world-class service.

**Quality and Global Standards** As discussed in Chapter 13 the concept of quality encompasses many factors, and the perception of quality rests solely with the customer. The level of technology reflected in the product, compliance with standards that reflect customer needs, support services and follow-through, and the price relative to competitive products are all part of a customer's evaluation and perception of quality. As noted, these requirements are different for consumers versus industrial customers because of differing end uses. The factors themselves also differ among industrial goods customers because their needs are varied. Finally, recent studies have demonstrated that perceptions of industrial product quality also can vary across cultural groups even in the most technologically developed countries.<sup>14</sup>

Business-to-business marketers frequently misinterpret the concept of quality. Good quality as interpreted by a highly industrialized market is not the same as that interpreted by standards of a less industrialized nation. For example, an African government had been buying hand-operated dusters for farmers to distribute pesticides in cotton fields. The duster supplied was a finely machined device requiring regular oiling and good care. But the fact that this duster turned more easily than any other on the market was relatively unimportant to the farmers. Furthermore, the requirement for careful oiling and care simply meant that in a relatively short time of inadequate care, the machines froze up and broke. The result? The local government went back to an older type of French duster that was heavy, turned with difficulty, and gave a poorer distribution of dust but that lasted longer because it required less care and lubrication. In this situation, the French machine possessed more relevant quality features and therefore, in marketing terms, possessed the higher quality.

Likewise, when commercial jet aircraft were first developed, European and American designs differed substantially. For example, American manufacturers built the engines slung below the wings, whereas the British competitor built the engines into the wings. The American design made for easier access and saved on repair and servicing costs, and the British design reduced aerodynamic drag and saved on fuel costs. Both designs were "high quality" for their respective markets. At the time, labor was relatively expensive in the United States, and fuel was relatively expensive in the United Kingdom.

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<sup>14</sup>Christian Homburg, Sabine Kuester, Nikolas Beutin, and Ajay Menon, "Determinants of Customer Benefits in Business-to-Business Markets: A Cross-Cultural Comparison," *Journal of International Marketing* 13 (2005), pp. 1–31.

## Quality Is Defined by the Buyer

### LO3

Characteristics of an industrial product

One important dimension of quality is how well a product meets the specific needs of the buyer. When a product falls short of performance expectations, its poor quality is readily apparent. However, it is less apparent but nonetheless true that a product that exceeds performance expectations can also be of poor quality. A product whose design exceeds the wants of the buyer's intended use generally has a higher price or is more complex, reflecting the extra capacity. Quality for many goods is assessed in terms of fulfilling specific expectations—no more and no less. Thus, a product that produces 20,000 units per hour when the buyer needs one that produces only 5,000 units per hour is not a quality product, in that the extra capacity is unnecessary to meet the buyer's use expectations. Indeed, this point is one of the key issues facing personal computer makers. Many business buyers are asking the question, "Do we really need the latest \$1,000 PC for everyone?" And more and more often the answer is no, the \$500 machines will do just fine.

This **price–quality relationship** is an important factor in marketing in developing economies, especially those in the first three stages of economic development described earlier. Standard quality requirements of industrial products sold in the U.S. market that command commensurately higher prices may be completely out of line for the needs of the less developed markets of the world. Labor-saving features are of little importance when time has limited value and labor is plentiful. Also of lesser value is the ability of machinery to hold close tolerances where people are not quality-control conscious, where large production runs do not exist, and where the wages of skillful workers justify selective fits in assembly and repair work. Features that a buyer does not want or cannot effectively use do not enhance a product's quality rating.

This distinction does not mean quality is unimportant or that the latest technology is not sought in developing markets. Rather, it means that those markets require products designed to meet their specific needs, not products designed for different uses and expectations, especially if the additional features result in higher prices. This attitude was reflected in a study of purchasing behavior of Chinese import managers, who ranked product quality first, followed in importance by price. Timely delivery was third and product style/features ranked 11th out of 17 variables studied. Hence, a product whose design reflects the needs and expectations of the buyer—no more, no less—is a quality product.

The design of a product must be viewed from all aspects of use. Extreme variations in climate create problems in designing equipment that is universally operable. Products that function effectively in western Europe may require major design changes to operate as well in the hot, dry Sahara region or the humid, tropical rain forests of Latin America. Trucks designed to travel the superhighways of the United States almost surely will experience operational difficulties in the mountainous regions of Latin America on roads that often barely resemble Jeep trails. Manufacturers must consider many variations in making products that will be functional in far-flung markets.

In light of today's competition, a company must consider the nature of its market and the adequacy of the design of its products. Effective competition in global markets means that overengineered and overpriced products must give way to products that meet the specifications of the customer at competitive prices. Success lies in offering products that fit a customer's needs—technologically advanced for some and less sophisticated for others, but all of high quality. To be competitive in today's global markets, the concept of total quality management (TQM) must be a part of all MNCs' management strategy, and TQM starts with talking to customers. Indeed, more and more frequently, industrial customers, including foreign ones, are directly involved in all aspects of the product development process, from generating new ideas to prototype testing.

A lack of universal standards is another problem in international sales of industrial products. The United States has two major areas of concern in this regard for the industrial goods exporter: a lack of common standards for manufacturing highly specialized equipment such as machine tools and computers, and the use of the inch-pound, or English, system of measurement. Conflicting standards are encountered in test methods for materials and equipment, quality control systems, and machine specifications. In the telecommunications industry, the vast differences in standards among countries create enormous problems for the expansion of that industry.

## CROSSING BORDERS 14.3

### Yes, Opinions Do Differ about the Metric System

In Canada, feelings about the metric system run high, as evinced by the following newspaper column:

A generation has not passed since Canada's traditional system of weights and measures was suppressed by bureaucratic edict, in a direct assault on the public will. Countless millions have since been spent—most of it imposed in costs to industry, but millions more taxed to feed Ottawa's metric police and propaganda machine. And after years of the most audacious brainwashing campaign ever attempted on our nation's children, this alien system has made some progress. I said "alien" not because metric is French, but because it is inhuman.

The metric system was originally imposed on France by the blood-soaked operatives of the Revolutionary Terror. It was then dragged across Europe by the armies of Napoleon. It met popular resistance wherever it appeared, and everywhere that resistance was quelled by force.

Yet to this day, in France, as in our old monarchist citadel of Quebec, there are workmen calculating in pieds (feet) and pouces (inches), in livres (pounds) and onces (ounces)—quietly, beyond the reach of the metric police and their informers. These are masons and carpenters and the like. Their eyes are wistful and they smile to themselves.

Ten is the magical number of tyranny. It can be halved only once, and can never go into thirds. It allows the deceptive ease of calculating in decimal places, such that when right we only approximately

hit the boat, but when wrong we land in another ocean.

In America, metric boosters insist that the switch is happening, but in stealthy ways. More than 2,000 American businesses use the metric system in research, development, and marketing, according to the U.S. Metric Association, a California advocacy group. All of Eastman Kodak's product development is done in the metric system; Procter & Gamble's Scope mouthwash is sold in incremental liter bottles. The reason is financial. Making deals in pounds isn't easy when you're negotiating with someone who speaks in grams.

Britain duly converted to the metric system, selling its gasoline in liters and, more recently, its supermarket goods in grams. But small shopkeepers remained exempt until January 1, 2000. It was then that the new government regulations took effect, requiring every seller of loose goods—things like fruits, vegetables, carpets, window shades, loose candy, and meat—to begin selling in metric units.

The point, of course, was to harmonize with the rest of the European Union, a concept that was dear to the government of Prime Minister Tony Blair. But a healthy percentage of the country's 96,000 small shopkeepers do not feel much like harmonizing, especially not with the Germans and the French.

Sources: David Warren, "Ten: The Magical Number of Tyranny," *National Post* (Montreal), July 8, 2000, p. A14; Cassell Bryan-Low, "Pound for Pound, A Veggie Peddler Takes on the EU—East London's Ms. Devers Snubs the Metric System; Selling by the Bowl Is Alleged," *The Wall Street Journal*, January 22, 2008, p. A1.

Efforts are being made through international organizations to create international standards. For example, the International Electrotechnical Commission is concerned with standard specifications for electrical equipment for machine tools. The search has also been engaged for ways in which an international roaming umbrella can be established for wireless communications. The U.S. Department of Commerce participates in programs to promote U.S. standards and is active in the development of the Global Harmonization Task Force, an international effort to harmonize standards for several industry sectors. The U.S. Trade Representative participates in negotiations to harmonize standards as well. Recently a key agreement was signed with the European Union to mutually recognize each other's standards in six sectors. The agreements will eliminate the need for double testing (once each on both sides of the Atlantic) and address inspection or certification in telecommunications, medical devices, electromagnetic compatibility, electrical safety, recreation craft, and pharmaceuticals. The agreements cover approximately \$50 billion in two-way trade and are expected to equate to a 2 to 3 percent drop in tariffs.

In addition to industry and international organizations setting standards, countries often have standards for products entering their markets. Saudi Arabia has been working on setting standards for everything from light bulbs to lemon juice, and it has asked its trading partners for help. The standards, the first in Arabic, will most likely be adopted by the entire

Arab world. Most countries sent representatives to participate in the standard setting. For example, New Zealand sent a representative to help write the standards for the shelf life of lamb. Unfortunately, the United States failed to send a representative until late in the discussions, and thus many of the hundreds of standards written favor Japanese and European products. Also, Saudi Arabia adopted the new European standard for utility equipment. The cost in lost sales to two Saudi cities by just one U.S. company, Westinghouse, was from \$15 to \$20 million for U.S.-standard distribution transformers. Increasingly, American firms are waking up to the necessity of participating in such standards discussions early on.

In the United States, conversion to the metric system and acceptance of international standards have been slow. Congress and industry have dragged their feet for fear conversion would be too costly. But the cost will come from *not* adopting the metric system; the General Electric Company had a shipment of electrical goods turned back from a Saudi port because its connecting cords were six feet long instead of the required standard of two meters.

As foreign customers on the metric system account for more and more American industrial sales, the cost of delaying standardization mounts. Measurement-sensitive products account for one-half to two-thirds of U.S. exports, and if the European Union bars nonmetric imports, as expected, many U.S. products will lose access to that market just as the European Union is on the threshold of major economic expansion. About half of U.S. exports are covered by the EU's new standards program.

To spur U.S. industry into action, the Department of Commerce indicated that accepting the metric system will not be mandatory unless you want to sell something to the U.S. government; all U.S. government purchases are to be conducted exclusively in metric. All federal buildings are now being designed with metric specifications, and highway construction funded by Washington uses metric units. Because the U.S. government is the nation's largest customer, this directive may be successful in converting U.S. business to the metric system. The Defense Department now requires metric specifications for all new weapons systems as well.

Despite the edicts from Washington, the National Aeronautics and Space Administration (NASA), which presides over some of the most advanced technology in the world, has resisted metrification. The \$100 billion-plus<sup>15</sup> space station contains some metric parts, but most of the major components are made in the United States and are based on inches and pounds. NASA's excuse was that it was too far into the design and production to switch. Unfortunately, the space station is supposed to be an international effort with Russia as one of the partners, and this decision created large problems for systems integration. Worse yet, the cause of the 1999 failure of the \$125 million Mars Climate Orbiter was a mix-up between metric and English measurement systems. NASA has agreed to make its next mission to the moon in 2020 metric.<sup>16</sup> Let's see if it keeps its promise. It is hard to believe that the only two countries not officially on the metric system are Myanmar and the United States. It is becoming increasingly evident that the United States must change or be left behind.

## ISO 9000 Certification: An International Standard of Quality

### LO4

The importance of ISO 9000 certification

With quality becoming the cornerstone of global competition, companies are requiring assurance of standard conformance from suppliers, just as their customers are requiring the same from them. ISO 9000<sup>17</sup> certification has also been found to positively affect the performance and stock prices of firms.

**ISO 9000s**, a series of five international industrial standards (ISO 9000–9004) originally designed by the International Organization for Standardization in Geneva to meet the need for product quality assurances in purchasing agreements, are becoming a quality assurance certification program that has competitive and legal ramifications when doing business in the European Union and elsewhere. The original ISO 9000 system was promulgated

<sup>15</sup>The original cost estimate was \$16 billion. "International Space Station Marks Its 10th Anniversary," *RIA Novosti*, January 29, 2008.

<sup>16</sup>David B. Williams, "Metric Mission," *Science World*, April 2, 2007, p. 6.

<sup>17</sup>ISO 14001, a parallel environmental management standard, has not experienced the same rate of diffusion as ISO 9000. See Magali Delmas and Ivan Montiel, "The Diffusion of Voluntary International Management Standards: Responsible Care, ISO 9000, and ISO 14001 in the Chemical Industry," *Policy Studies Journal* 36 (2008), pp. 65–82.



The Japanese manufacturer is quite proud of the ISO 9000 quality ratings for its plant in San Jose, Costa Rica.

in 1994. In 2000 the system was streamlined, as it was again in 2006. ISO 9000 concerns the registration and certification of a manufacturer's quality system. It is a certification of the existence of a quality control system that a company has in place to ensure it can meet published quality standards. ISO 9000 standards do not apply to specific products. They relate to generic system standards that enable a company, through a mix of internal and external audits, to provide assurance that it has a quality control system. It is a certification of the production process only and does not guarantee that a manufacturer produces a "quality" product or service. The series describes three quality system models, defines quality concepts, and gives guidelines for using international standards in quality systems.

To receive ISO 9000 certification, a company requests a certifying body (a third party authorized to provide an ISO 9000 audit) to conduct a registration assessment—that is, an audit of the key business processes of a company. The assessor will ask questions about everything from blueprints to sales calls to filing. "Does the supplier meet promised delivery dates?" and "Is there evidence of customer satisfaction?" are two of the questions asked and the issues explored. The object is to develop a comprehensive plan to ensure that minute details are not overlooked. The assessor helps management create a quality manual, which will be made available to customers wishing to verify the organization's reliability. When accreditation is granted, the company receives certification. A complete assessment for recertification is done every four years, with intermediate evaluations during the four-year period.

Although ISO 9000 is generally voluntary, except for certain regulated products, the EU Product Liability Directive puts pressure on all companies to become certified. The directive holds that a manufacturer, including an exporter, will be liable, regardless of fault or negligence, if a person is harmed by a product that fails because of a faulty component. Thus, customers in the European Union need to be assured that the components of their products are free of defects or deficiencies. A manufacturer with a well-documented quality system will be better able to prove that products are defect free and thus minimize liability claims.

A strong level of interest in ISO 9000 is being driven more by marketplace requirements than by government regulations, and ISO 9000 is now an important competitive marketing tool in Europe and around the world.<sup>18</sup> As the market demands quality and more and more companies adopt some form of TQM, manufacturers are increasingly requiring ISO 9000 registration of their suppliers. Companies manufacturing parts and components in China are quickly discovering that ISO 9000 certification is a virtual necessity, and the Japanese construction industry now requires ISO 9000 as part of the government procurement process. More and more buyers, particularly those in Europe, are refusing to buy from manufacturers that do not have internationally recognized third-party proof of their quality capabilities. ISO 9000 may also be used to serve as a means of differentiating "classes" of suppliers, particularly in high-tech areas where high product reliability is crucial. In other words, if two suppliers are competing for the same contract, the one with ISO 9000 registration may have a competitive edge.

Although more and more countries (now more than 100) and companies continue to adopt ISO 9000 standards, many have complaints about the system and its spread. For example, 39 electronics companies battled against special Japanese software criteria for ISO 9000. Electronics companies also protested against the establishment of a new ISO Health and Safety Standard. Still others are calling for more comprehensive international standards along the lines of America's Malcolm Baldrige Award, which considers seven criteria—leadership, strategic planning, customer and market focus, information and analysis, human resource development, management, and business results. The telecommunications industry recently promulgated an industry-specific TL 9000 certification program, which combines aspects of ISO 9000 and several other international quality standards.

<sup>18</sup>"China to Establish Industrial Garden in Nigeria," *Xinhua News Agency*, August 22, 2005.

Perhaps the most pertinent kind of quality standard is now being developed by the University of Michigan Business School and the American Society for Quality Control.<sup>19</sup> Using survey methods, their American Customer Satisfaction Index (ACSI) measures customers' satisfaction and perceptions of quality of a representative sample of America's goods and services. The approach was actually developed in Sweden and is now being used in other European and Asian countries as well. The appeal of the ACSI approach is its focus on results, that is, quality as perceived by product and service users. So far the ACSI approach has been applied only in consumer product and service contexts; however, the fundamental notion that customers are the best judges of quality is certainly applicable to international business-to-business marketing settings as well. Individual industrial marketing firms are seeking even better ways to implement quality improvement programs, including using similar techniques as those employed by ACSI.

## Business Services

For many industrial products, the revenues from associated services exceed the revenues from the products. Perhaps the most obvious case is cellular phones, in which the physical product is practically given away to gain the phone services contract. Or consider how inexpensive printers may seem until the costs of operation (i.e., ink cartridges) are included. Indeed, for many capital equipment manufacturers, the margins on after-sale services (i.e., maintenance contracts, overhauls, repairs, and replacement parts) are much higher than the margins on the machinery itself. Furthermore, when companies lease capital equipment to customers, the distinction between products and services almost disappears completely. When a business customer leases a truck, is it purchasing a vehicle or transportation services?

Businesses also buy a variety of services that are not associated with products. Our favorite examples are the at-sea-satellite-launch services now provided by Boeing<sup>20</sup> and the Russian navy, the latter by submarine.<sup>21</sup> We also appreciate the Ukrainian cargo company that charges \$24,000 an hour to rent space on its giant jets. Other professional services are purchased from advertising and legal agencies, transportation and insurance companies, oil field services, banks and investment brokers,<sup>22</sup> and healthcare providers, to name only a few. Both categories of business services are discussed in this section.

## After-Sale Services

Effective competition abroad requires not only proper product design but effective service, prompt deliveries, and the ability to furnish spare and replacement parts without delay. For example, GE Medical Systems provides a wide range of after-sale services for hospitals that buy MRIs and other equipment—training, information technologies, associated healthcare services, and parts and accessories.<sup>23</sup> In the highly competitive European Union, it is imperative to give the same kind of service a domestic company or EU company can give.

For many technical products, the willingness of the seller to provide installation and training may be the deciding factor for the buyers in accepting one company's product over another's. South Korean and other Asian businesspeople are frank in admitting they prefer to buy from American firms but that Japanese firms often get the business because of outstanding after-sales service. Frequently heard tales of conflicts between U.S. and foreign firms over assistance expected from the seller are indicative of the problems of after-sales service and support. A South Korean executive's experiences with an American engineer and some Japanese engineers typify the situation: The Korean electronics firm purchased semiconductor-chip-making equipment for a plant expansion. The American engineer was slow in completing the

<sup>19</sup>Claes Fornell, Michael D. Johnson, Eugene W. Anderson, Jaesung Cha, and Barbara Everitt Bryant, "The American Consumer Index: Nature, Purpose, and Findings," *Journal of Marketing* 60, no. 4 (October 1996), pp. 35–46; <http://www.asq.org>, 2008; <http://www.cfigroup.com>, 2008.

<sup>20</sup>W. J. Hennigan, "Venture May Lose Boeing as Owner," *Los Angeles Times*, November 12, 2009, pp. B1, B6.

<sup>21</sup>"Sail of the Century," *The Economist*, June 18, 2005, pp. 77–78.

<sup>22</sup>John U. Farley, Andrew F. Hayes, and Praveen K. Kopalle, "Choosing and Upgrading Financial Services Dealers in the U.S. and U.K.," *International Journal of Research in Marketing* 21, no. 4 (2004), pp. 359–75.

<sup>23</sup>See <http://www.gehealthcare.com>, 2010.

installation; he stopped work at 5:00 p.m. and would not work on weekends. The Japanese, installing other equipment, understood the urgency of getting the factory up and running; without being asked, they worked day and night until the job was finished.

Unfortunately this example is not an isolated case. In another example, Hyundai Motor Company bought two multimillion-dollar presses to stamp body parts for cars. The presses arrived late, even more time was required to set up the machines, and Hyundai had to pay the Americans extra to get the machines to work correctly. Such problems translate into lost business for U.S. firms. Samsung Electronics Company, Korea's largest chipmaker, used U.S. equipment for 75 percent of its first memory-chip plant; when it outfitted its most recent chip plant, it bought 75 percent of the equipment from Japan. Of course, not all American companies have such problems. Indeed, in India Intel recently opened a data center comprising an Internet server farm of hundreds of servers. Already customers in many countries connect and store their servers and have them serviced by Intel at such centers.

Customer training is rapidly becoming a major after-sales service when selling technical products in countries that demand the latest technology but do not always have trained personnel. China demands the most advanced technical equipment but frequently has untrained people responsible for products they do not understand. Heavy emphasis on training programs and self-teaching materials to help overcome the common lack of skills to operate technical equipment is a necessary part of the after-sales service package in much of the developing world. While perhaps McDonald's Hamburger University is the most famous international customer training center, industrial sellers may soon catch up. Cisco Systems, collaborating with the government and a university in Singapore,<sup>24</sup> established the first Cisco Academy Training Centre to serve that region of the world, and Intel established e-Business Solutions Centers in five European countries.

A recent study of international users of heavy construction equipment revealed that, next to the manufacturer's reputation, quick delivery of replacement parts was of major importance in purchasing construction equipment. Furthermore, 70 percent of those questioned indicated they bought parts not made by the original manufacturer of the equipment because of the difficulty of getting original parts. Smaller importers complain of U.S. exporting firms not responding to orders or responding only after extensive delay. It appears that the importance of timely availability of spare parts to sustain a market is forgotten by some American exporters that are used to quick deliveries in the domestic market. When companies are responsive, the rewards are significant. U.S. chemical production equipment manufacturers dominate sales in Mexico because, according to the International Trade Administration, they deliver quickly. The ready availability of parts and services provided by U.S. marketers can give them a competitive edge.

Some international marketers also may be forgoing the opportunity of participating in a lucrative aftermarket. Certain kinds of machine tools use up to five times their original value in replacement parts during an average life span and thus represent an even greater market. One international machine tool company has capitalized on the need for direct service and available parts by changing its distribution system from "normal" to one of stressing rapid service and readily available parts. Instead of selling through independent distributors, as do most machine tool manufacturers in foreign markets, this company established a series of company stores and service centers similar to those found in the United States. The company can render service through its system of local stores, whereas most competitors must dispatch service people from their home-based factories. The service people are kept on tap for rapid service calls in each of its network of local stores, and each store keeps a large stock of standard parts available for immediate delivery. The net result of meeting industrial needs quickly is keeping the company among the top suppliers in foreign sales of machine tools.

International small-package door-to-door express air services and international toll-free telephone service have helped speed up the delivery of parts and have made after-sales technical service almost instantly available. Amdahl, the giant mainframe computer maker, uses air shipments almost exclusively for cutting inventory costs and ensuring premium customer service, which is crucial to competing against larger rivals. With increasing

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<sup>24</sup>"SMEs Set to Boost IT Services in Asia," *Business Times Singapore*, August 22, 2005.



frequency, electronics, auto parts, and machine parts sent by air have become a formidable weapon in cutting costs and boosting competitiveness. Technical advice is only a toll-free call away, and parts are air-expressed immediately to the customer. Not only does this approach improve service standards, but it also is often more cost effective than maintaining an office in a country, even though foreign-language speakers must be hired to answer calls.

After-sales services are not only crucial in building strong customer loyalty and the all-important reputation that leads to sales at other companies, but they are also almost always more profitable than the actual sale of the machinery or product.

## Other Business Services

### LO5

The growth of business services and nuances of their marketing

Trade creates demands for international services.<sup>25</sup> Most business services companies enter international markets to service their local clients abroad.<sup>26</sup> Accounting, advertising, and law<sup>27</sup> firms were among the early companies to establish branches or acquire local affiliations abroad to serve their U.S. multinational clients. Hotels and auto-rental agencies followed the business traveler abroad. Most recently, healthcare services providers have been following firms abroad—Blue Cross is now selling HMO services to American companies operating in Mexico. Once established, many of these **client followers**, as one researcher refers to them, expand their client base to include local companies as well. As global markets grow, creating greater demand for business services, service companies become international market seekers.

As mentioned in Chapter 13, the mode of entry for most consumer services firms is licensing, franchising, strategic alliances,<sup>28</sup> or direct. This tendency is so because of the inseparability of the creation and consumption of the services. However, because some business services have intrinsic value that can be embodied in some tangible form (such as a blueprint or architectural design), they can be produced in one country and exported to another. Data processing and data analysis services are good examples. The analysis or processing is completed on a computer located in the United States, and the output (the service) is transmitted via the Internet to a distant customer. Architecture, systems integration,<sup>29</sup> and engineering consulting services are exportable when the consultant travels to the client's site and later returns home to write and submit a report or a design.

Business services firms face most of the same constraints and problems confronting merchandise traders. Protectionism is the most serious threat to the continued expansion of international services trade. The growth of international services has been so rapid during the last decade it has drawn the attention of local companies, governments, and researchers. As a result, direct and indirect trade barriers have been imposed to restrict foreign companies from domestic markets. Every reason, from the protection of infant industries to national security, has been used to justify some of the restrictive practices. A list of more than 2,000 instances of barriers to the free flow of services among nations was recently compiled by the U.S. government. In response to the threat of increasing restriction, the United States has successfully negotiated to open business services markets through both NAFTA and GATT.

Until the GATT and NAFTA agreements, few international rules of fair play governed trade in services. Service companies faced a complex group of national regulations that impeded the movement of people and technology from country to country. At least one study has demonstrated that personnel and intellectual property issues are key drivers of success and failure, particularly in knowledge-based services such as consulting, engineering, education,

<sup>25</sup>Perhaps one of the best examples of trade leading demand for services is the critical importance of Japanese trading companies to that country. See Anthony Goerzen and Shige Makino, "Multinational Corporation Internationalization in the Service Sector: A Study of Japanese Trading Companies," *Journal of International Business Studies* 38 (2007), pp. 1149–69.

<sup>26</sup>Lihong Qian and Andrew Delios, "Internationalization and Experience: Japanese Banks' International Expansion, 1980–1998," *Journal of International Business Studies* 39 (2008), pp. 231–48.

<sup>27</sup>John Tagliabue, "Law Firms from U.S. Invade Paris," *The New York Times*, July 25, 2007, pp. C1, C4.

<sup>28</sup>One Chicago law firm has entered into a strategic alliance with a Chinese counterpart. See Nathan Koppel and Andrew Batson, "A U.S. Law Firm Takes a New Route into China," *The Wall Street Journal*, January 30, 2007, pp. B1, B2.

<sup>29</sup>Janet Y. Murray, Masaki Kotabe, and Stanford A. Westjohn, "Global Sourcing Strategy and Performance of Knowledge-Intensive Business Services: A Two-Stage Strategic Fit Model," *Journal of International Marketing* 17, no. 4 (2009), pp. 90–105.

and information technology.<sup>30</sup> The United States and other industrialized nations want their banks, insurance companies, construction firms, and other business service providers to be allowed to move people, capital, and technology around the globe unimpeded. Restrictions designed to protect local markets range from not being allowed to do business in a country to requirements that all foreign professionals pass certification exams in the local language before being permitted to practice. In Argentina, for example, an accountant must have the equivalent of a high school education in Argentinean geography and history before being permitted to audit the books of a multinational company's branch in Buenos Aires.

Restrictions on cross-border data flows are potentially the most damaging to both the communications industry and other MNCs that rely on data transfers across borders to conduct business. Some countries impose tariffs on the transmission of data, and many others are passing laws forcing companies to open their computer files to inspection by government agencies or are tightly controlling transmission domestically. Most countries have a variety of laws to deal with the processing and electronic transmission of data across borders. In many cases, concern stems from not understanding how best to tax cross-border data flows.

As mentioned earlier, competition in all sectors of the services industry is increasing as host-country markets are being invaded by many foreign firms. The practice of following a client into foreign markets and then expanding into international markets is not restricted to U.S. firms. Service firms from Germany, Britain, Japan, and other countries follow their clients into foreign markets and then expand to include local business as well. Telecommunications, advertising, and construction are U.S. services that face major competition, not only from European and Japanese companies but also from representatives of Brazil, India, and other parts of the world.

Clearly opportunities for the marketing of business services will continue to grow well into the 21st century. International marketers will have to be quite creative in responding to the legal and cultural challenges of delivering high-quality business services in foreign markets and to foreign customers. The success of international business services firms will of course depend on finding high-quality employees (with technical and interpersonal skills and a strong customer orientation)<sup>31</sup> to build and maintain the personal relationships that are so important, particularly when doing business across cultures. We will expand on this last point in Chapters 17 and 19.

## Trade Shows: A Crucial Part of Business-to-Business Marketing

### LO6

The importance of trade shows in promoting industrial goods

The promotional problems encountered by foreign industrial marketers are little different from the problems faced by domestic marketers. Until recently there has been a paucity of specialized advertising media in many countries.<sup>32</sup> In the last decade, however, specialized industrial media have been developed to provide the industrial marketer with a means of communicating with potential customers, especially in western Europe and to some extent in eastern Europe, the Commonwealth of Independent States (CIS), and Asia.

In addition to advertising in print media and reaching industrial customers through catalogs, Web sites,<sup>33</sup> and direct mail, the trade show or trade fair has become the primary vehicle for doing business in many foreign countries. As part of its international promotion activities, the U.S. Department of Commerce sponsors trade fairs in many cities around the world. Additionally, local governments in most countries sponsor annual trade shows. African countries, for example, host more than 70 industry-specific trade shows.

<sup>30</sup>Chris Styles, Paul G. Patterson, and Vinh Q. La, "Exporting Services to Southeast Asia: Lessons from Australian Knowledge-Based Service Exporters," *Journal of International Marketing* 13 (2005), pp. 104–28.

<sup>31</sup>Vinh La, Paul Patterson, and Chris Styles, "Client-Perceived Performance and Value in Professional B-2-B Services: An International Perspective," *Journal of International Business Studies* 40, no. 2 (2009), pp. 274–300.

<sup>32</sup>Of course, it should be noted that some industrial companies still use nonspecialized media, building brand awareness at all levels. Perhaps the best example is Intel's sponsorship of the official Web site of the Tour de France in 2002.

<sup>33</sup>For illustrative examples of the burgeoning information available to industrial customers on Web sites, see <http://www.caterpillar.com>, <http://www.fluor.com>, <http://www.hewlett-packard.com>, and <http://www.qualcom.com>.

So you want to buy an Airbus 380? How about kicking the tires of one at the Paris Air Show, the world's biggest aerospace trade show?



Trade shows serve as the most important vehicles for selling products, reaching prospective customers, contacting and evaluating potential agents and distributors, and marketing in most countries. Firms that have successfully integrated trade show attendance and follow-up personal selling efforts have been consistently shown to be more profitable.<sup>34</sup> Although important in the United States,<sup>35</sup> trade shows serve a much more important role in other countries. They have been at the center of commerce in Europe for centuries and are where most prospects are found. European trade shows attract high-level decision makers who are attending not just to see the latest products but to buy. Pre-show promotional expenditures are often used in Europe to set formal appointments. The importance of trade shows to Europeans is reflected in the percentage of their media budget spent on participating in trade events and how they spend those dollars. On average, Europeans spend 22 percent of their total annual media budget on trade events, whereas comparable American firms typically spend less than 5 percent. Europeans tend not to spend money on circuslike promotions, gimmicks, and such; rather, they focus on providing an environment for in-depth dealings. More than 2,000 major trade shows are held worldwide every year. The Hanover Industry Fair (Germany), the largest trade fair in the world, has nearly 6,000 exhibitors, who show a wide range of industrial products to 600,000 visitors.

Trade shows provide the facilities for a manufacturer to exhibit and demonstrate products to potential users and to view competitors' products. They are an opportunity to create sales and establish relationships with agents, distributors, franchisees, and suppliers that can lead to more nearly permanent distribution channels in foreign markets. In fact, a trade show may be the only way to reach some prospects. Trade show experts estimate that 80 to 85 percent of the people seen on a trade show floor never have a salesperson call on them. Several Web sites now specialize in virtual trade shows. They often include multimedia and elaborate product display booths that can be virtually toured. Some of these virtual trade shows last only a few days during an associated actual trade show.

The number and variety of trade shows are such that almost any target market in any given country can be found through this medium. Most remarkable was the Medical Expo in Havana in 2000—the first trade show to be sanctioned by both the U.S. and Cuban governments in more than four decades. Over 8,000 Cuban doctors, nurses, technicians, and hospital administrators attended. This initial event was followed in 2002 with a major food products trade show in Havana. In eastern Europe, fairs and exhibitions offer companies the opportunity to meet new customers, including private traders, young entrepreneurs, and

<sup>34</sup>Timothy Smith, Srinath Gopalakrishnan, and Paul M. Smith, "The Complementary Effect of Trade Shows on Personal Selling," *International Journal of Research in Marketing* 21, no. 1 (2004), pp. 61–76.

<sup>35</sup>David Pogue, "Fixated on TVs, and What's on Them," *The New York Times*, January 10, 2008, pp. C1, C7.

## CROSSING BORDERS 14.4

### No More Aching Feet, but What About the 15-Ton Russian Tank?

During April 2000, the first stand-alone virtual trade show was staged by ISP Virtual Show. It was aimed at an appropriate audience—Internet service providers (ISPs). The address was [ISPVirtualShow.com](http://ISPVirtualShow.com) (the site is down now, but you can still take a look by Googling it). Technology for the show was provided by [iTradeFair.com](http://iTradeFair.com), a Web site worth the visit.

According to the promoters, “The advantages of a virtual trade show far outweigh those of the physical model. Exhibitors (booths start at \$1,995) and attendees (tickets are \$99) from all over the world will now be able to exhibit and attend direct from their desktops. There are endless benefits of a virtual show, including massive reductions in costs both in exhibiting and manpower terms, savings on booth space and buildings, accommodations, flights, expenses, the obligatory bar bills and costs of time spent out of the office.”

The virtual trade show offers a fresh alternative to the traditional model. Using advanced technology, anyone anywhere in the world can visit the virtual show and access information in his or her own language—making language barriers a thing of the past. Also, if attendees and exhibitors would like to continue a discussion offline, clocks displaying times from all over the world

make scheduling easy. Finally, weary executives attending the same trade shows year in, year out will no longer have to suffer aching feet, hot stuffy rooms without air-conditioning, and overpriced, plastic food.

Although this pitch sounds great, we believe that an aspect of real trade shows that the virtual ones miss is the face-to-face contact and the all-important interpersonal relationship building that goes on over drinks or during those plastic meals. And there is no virtual way to achieve the same effect as a Russian software developer who recently displayed a 15-ton Russian tank in his booth at Comtek Trade Show in Moscow, or the Russian jet engine supplier that used scantily clad women dancers to attract crowds to its booth at the 2008 Farnborough Air Show. We note that the Show organizers banned the dancers, and that created even more of an uproar. Ah, marketing! In any case, we shall see how the new promotional medium of virtual trade shows evolves.

Sources: “ISP Virtual Show: World’s First Virtual Trade Show,” *M2 Presswire*, October 26, 1999; Jeanette Borzo, “Moscow’s Comtek Trade Show Confronts Internet Challenge,” *Dow Jones News Service*, April 19, 2000; “ICUEE Is the Demo Expo,” *Transmission & Distribution*, August 1, 2005, p. 74; “Russian Firm Banned from Using Scantily Clad Women to Lure Customers to Its Stand At Farnborough Air Show,” *Daily Mail (UK)*, July 19, 2008, online; [www.iTradeFair.com](http://www.iTradeFair.com), 2010.

representatives of nonstate organizations. The exhibitions in countries such as Russia and Poland offer a cost-effective way of reaching a large number of customers who might otherwise be difficult to target through individual sales calls. Specialized fairs in individual sectors such as computers, the automotive industry, fashion, and home furnishings regularly take place.

In difficult economic and/or political circumstances, online trade shows become a useful, but obviously less than adequate, substitute. A good example of the kinds of services being developed can be found in Crossing Borders 14.4. During the weakened global economy at the turn of the century, slimmer travel budgets and SARS scares dramatically reduced attendance, and even forced cancellations, of traditionally popular international trade fairs. Political conflicts between the European Union and the United States over Middle East policies resulted in the U.S. Department of Defense discouraging American attendance at the 2003 Paris Air Show. Top American executives at Boeing, Lockheed, and the like dutifully stayed away. Exhibit space declined by 5 percent, and orders announced dropped from \$45 billion in 2001 to \$32 billion. It is hard to estimate what the costs in terms of international orders are for firms such as Boeing when their top executives cannot mix with potential customers at such a crucial event. We do know that Airbus inked orders for dozens of commercial aircraft from customers in Qatar and the Arab Emirates. Not even the best online trade show imaginable can make up for this apparent step backward in international trade and cooperation.<sup>36</sup>

<sup>36</sup>Information about trade shows is available from the following sources: the U.S. Trade Information Center’s *Export Promotion Calendar*, which lists dates and locations of trade shows worldwide; *Europe Trade Fairs*, which lists European shows, including the U.S. Department of Commerce–sponsored shows; *Trade Shows Worldwide* (published by Gale Research), a comprehensive listing of more than 6,000 trade shows worldwide; and *International Trade Fairs and Conferences* (published by Co-Mar Management Services), which lists 5,000 trade shows worldwide.

## Relationship Marketing in Business-to-Business Contexts

### LO7

The importance of relationship marketing for industrial products and services

The characteristics that yield the uniqueness of industrial products and services lead naturally to **relationship marketing**.<sup>37</sup> The long-term relationships with customers that define relationship marketing fit the characteristics inherent in industrial products and are a viable strategy for business-to-business marketing. The first and foremost characteristic of industrial goods markets is the motive of the buyer: to make a profit. Industrial products fit into a services delivery or manufacturing process, and their contributions will be judged on how well they contribute to that process. For an industrial marketer to fulfill the needs of a customer, the marketer must understand those needs as they exist today and how they will change as the buyer strives to compete in global markets that call for long-term relationships. The key functions of global account managers revolve around the notions of intelligence gathering, coordination with the customer's staff, and reconfiguration (that is, adapting the practices and process to the changing competitive environment).<sup>38</sup>

The industrial customer's needs in global markets are continuously changing, and suppliers' offerings must also continue to change. The need for the latest technology means that it is not a matter of selling the right product the first time but rather of continuously changing the product to keep it right over time. The objective of relationship marketing is to make the relationship an important attribute of the transaction,<sup>39</sup> thus differentiating oneself from competitors. It shifts the focus away from price to service and long-term benefits. The reward is loyal customers that translate into substantial long-term profits.

Focusing on long-term relationship building will be especially important in most international markets where culture dictates stronger ties between people and companies. Particularly in countries with collectivistic and high-context cultures, such as those in Latin America or Asia, trust will be a crucial aspect of commercial relationships. Constant and close communication with customers will be the single most important source of information about the development of new industrial products and services. Indeed, in a recent survey of Japanese professional buyers, a key choice criterion for suppliers was a trait they called "caring" (those who defer to requests without argument and recognize that in return buyers will care for the long-term interests of sellers). Longer-term and more communication-rich relationships are keys to success in international industrial markets.

As in all areas of international business, the Internet is facilitating relationship building and maintenance in new ways. One study has shown key aspects of managing this aspect of international industrial marketing to include Web site design, multilingual access, cultural considerations, and effective marketing of the Web site itself.<sup>40</sup> Cisco Systems is a leader in this area; it not only supplies the hardware that allows B2B commerce to work, but its relationship management practices and process also serve as models for the industry. Cisco's international customers can visit its Web site to check out product specs and to order. That information is then routed on the Internet through Cisco to its suppliers. A full 65 percent of the orders move directly from the supplier to the customer—Cisco never touches them. Things are built only after they are ordered; thus little, if any, inventory is kept in warehouses. Based on Cisco's success, businesses around the world are beginning to reorganize themselves accordingly.<sup>41</sup>

<sup>37</sup>Jagdish Sheth and Atul Parvatiyar, "Evolving Relationship Marketing into a Discipline," *Journal of Relationship Marketing* 1, no. 1 (2002), pp. 3–16; Linda Hui Shi, J. Chris White, Shaoming Zou, and S. Tamer Cavusgil, "Global Account Management Strategies: Drivers and Outcomes," *Journal of International Business Studies* (2010), online.

<sup>38</sup>Linda H. Shi, Shaoming Zou, J. Chris White, Regina C. McNally, and S. Tamer Cavusgil, "Global Account Management Capability: Insights from Leading Suppliers," *Journal of International Marketing* 13 (2005), pp. 93–114.

<sup>39</sup>Atul Sharma, Louise Young, and Ian Wilkinson, "The Commitment Mix: Dimensions of Commitment in International Trading Relationships in India," *Journal of International Marketing* 14 (2006), pp. 64–91.

<sup>40</sup>Riyand Eid, Ibrahim Elbeltagi, and Mohammed Zairi, "Making Business-to-Business International Internet Marketing Effective: A Study of Critical Factors Using a Case-Study Approach," *Journal of International Marketing* 14 (2006), pp. 87–109.

<sup>41</sup>Jeff Borden, "Cisco Humanizes Technology and Connects the World," *Marketing News*, September 1, 2008, pp. 14–18.

# Solar Turbines Inc.

## A Global Industrial Marketer



With more than 80 percent of its sales outside the United States, Solar Turbines Inc. is the most global subsidiary of one of America's most global companies. More than half of Caterpillar's 2009 sales of over \$32 billion were to customers outside the United States, making the parent corporation one of the country's leading exporters. Pictured here is work on the road leading to the airport at Serengeti National Park in Tanzania.

Solar industrial gas turbines are used by customers in 86 countries worldwide, in the oil and gas industries, electrical power generation, and marine propulsion. Solar promotes its products on the Internet (see [www.solarturbines.com](http://www.solarturbines.com)) and in brochures and print media around the world, as represented below:

Produisez l'énergie  
dont vous avez besoin  
tout en préservant  
l'air que vous respirez.



Les turbines à gaz n'ont pas seulement acquis la réputation de produire de l'énergie de façon super-efficace, elles le font même sans contaminer l'environnement.

La propriété du carburant (gaz naturel) et le procédé de combustion intégral dans les turbines à gaz en sont les raisons inhérentes.

Solar Turbines Incorporated a affiné cette technologie en créant des systèmes de cogénération à turbines à gaz qui répondent aux exigences accrues de coût-efficacité et de la lutte contre la pollution atmosphérique. Nous fournissons également avec des systèmes de cogénération de turbines à gaz d'une puissance s'échelonnant entre 1 et 10 MW, satisfaisant les besoins en énergie et en air propre d'un éventail important d'entreprises dans de nombreux pays.

Une conversation avec nous et vous saurez pourquoi, dans le monde de la production d'énergie, les turbines Solar sont un bol d'air bien frais.

Pour des renseignements supplémentaires, appelez Solar Turbines Europe SA au 00.32.0071.25000 ou contactez-nous au fax 00.32.0071.244739.

**Solar Turbines**  
A Caterpillar Company



### SOLAR CUBRE DOS TERCIOS DE LA TIERRA.

Desde las primeras instalaciones. Desde sus primeros clientes en el extranjero hasta hoy. Desde las primeras instalaciones de la planta de energía de México. Desde las primeras instalaciones de la planta de energía de México. Desde las primeras instalaciones de la planta de energía de México.

Desde las primeras instalaciones. Desde sus primeros clientes en el extranjero hasta hoy. Desde las primeras instalaciones de la planta de energía de México. Desde las primeras instalaciones de la planta de energía de México.

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Desde las primeras instalaciones. Desde sus primeros clientes en el extranjero hasta hoy. Desde las primeras instalaciones de la planta de energía de México. Desde las primeras instalaciones de la planta de energía de México.

**Solar Turbines**  
www.solarturbines.com

**Продукция фирмы Solar Turbines Incorporated  
(Солар Турбинз Инкорпорейтед)**

Производство турбинных двигателей и компрессоров для газотурбинных двигателей. Производство турбинных двигателей для газотурбинных двигателей. Производство турбинных двигателей для газотурбинных двигателей.

Модель	Мощность (МВт)	Скорость вращения (об/мин)	Диаметр (мм)	Длина (мм)	Вес (кг)
GT100	100	3000	3000	3000	3000
GT200	200	3000	3000	3000	3000
GT300	300	3000	3000	3000	3000
GT400	400	3000	3000	3000	3000
GT500	500	3000	3000	3000	3000
GT600	600	3000	3000	3000	3000
GT700	700	3000	3000	3000	3000
GT800	800	3000	3000	3000	3000
GT900	900	3000	3000	3000	3000
GT1000	1000	3000	3000	3000	3000

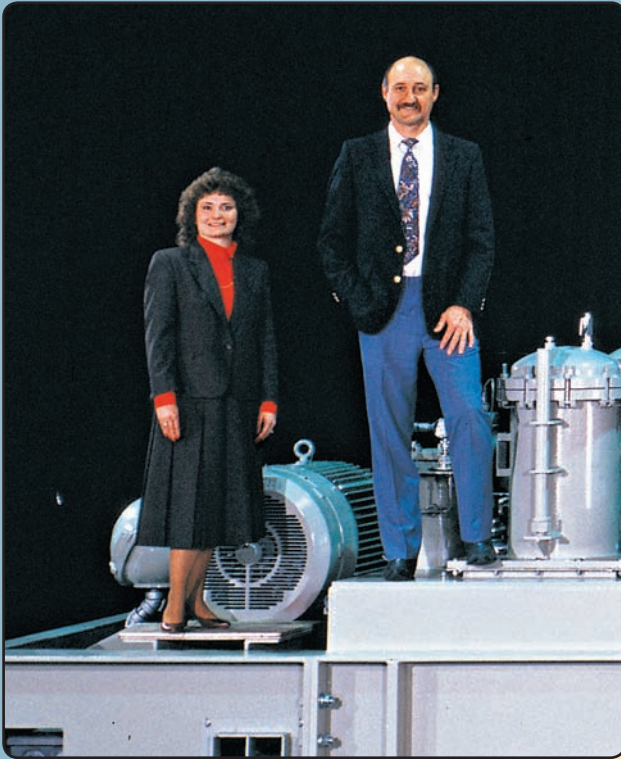
An ad appearing in a French trade publication. It emphasizes the energy-saving and low-pollution attributes of the products. Notice the Caterpillar yellow in the logo and the phone number for the European subsidiary offices.

The compact size makes Solar gas turbines ideally suited for offshore oil applications in places like the North Sea, the Gulf of Mexico, and offshore Malaysia and Latin America.

A Russian-language brochure. The former Soviet Union and now the Russian oil and gas industry has remained an important customer for Solar for more than 40 years.

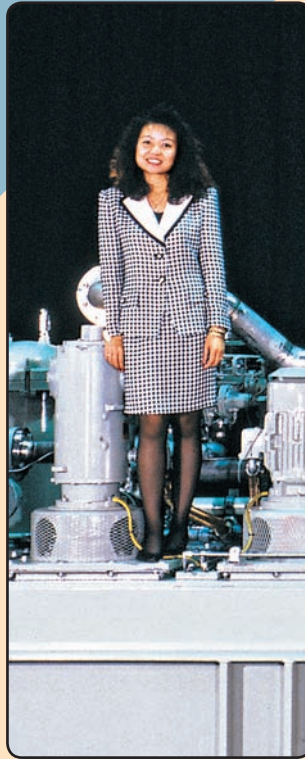
Courtesy of Solar Turbines, Inc.

# The Project Team

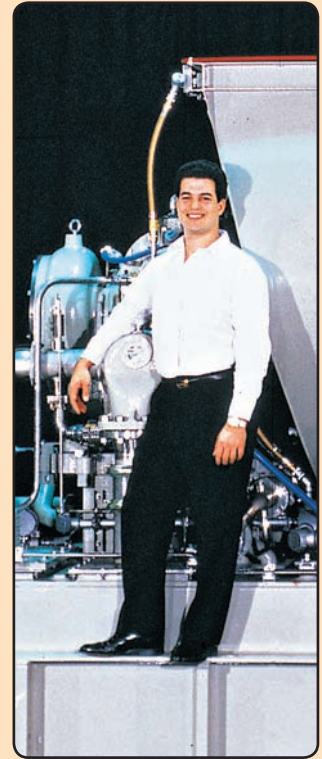


**The Customer** is involved as a vital member of the Project Team from the initial inquiry to final acceptance. The Customer works with and issues project specifications to our ...

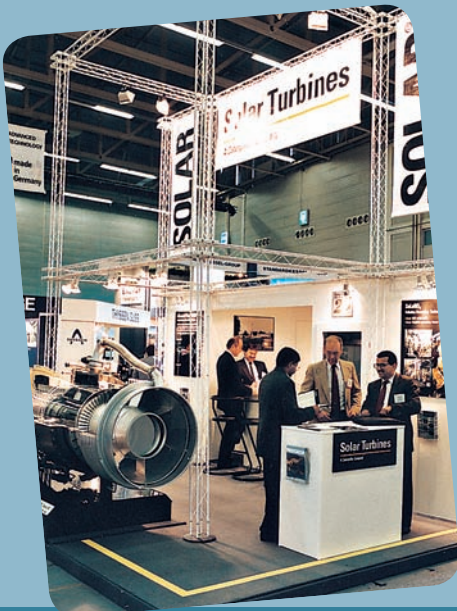
**Sales Engineer**, who maintains initial Customer contact, prompts analysis of Customer needs, submits a comprehensive proposal to the Customer, monitors execution of the order, and submits the order to the assigned ...



**Application Engineer**, who is responsible for determining the best product match for Customer requirements and recommending alternative approaches as appropriate. The Application Engineer works closely with ...



**Engineering and Control Systems**, where gas turbines, gas compressors, and controls are designed and gas turbine packages are customized for the customers based on proven designs.



Solar Turbines sells its products and services through project teams that include both customer personnel and vendors. Solar has followed its American customers around the world, supplying equipment and services for their global ventures. Of course, the firm sells directly to a wide variety of foreign firms as well.

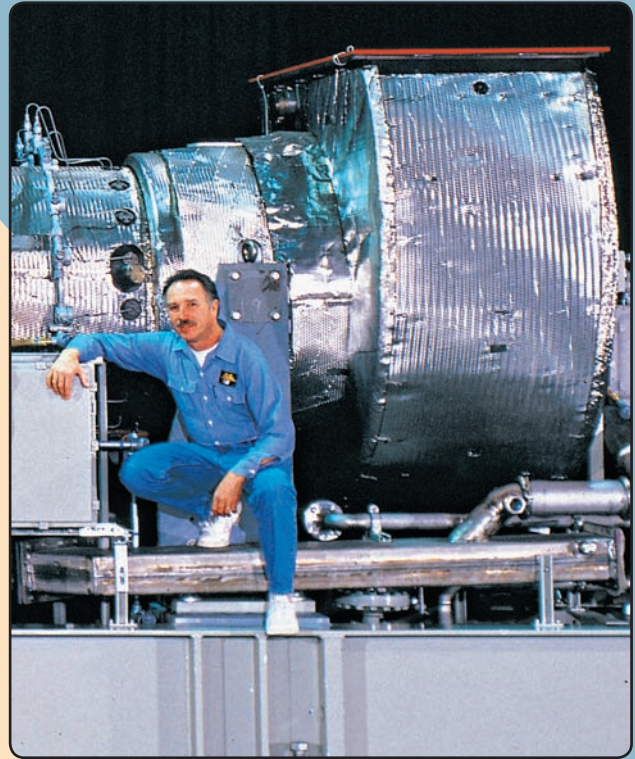
Personal selling is the most important aspect of the promotions mix for industrial companies like Solar. In addition to calling on clients directly, sales engineers attend key trade shows around the world, such as this one in Amsterdam.



**Project Manager** handles all aspects of the order, maintains liaison with the Customer, controls documentation, arranges quality audits, and is responsible for on-time shipment and scheduling equipment commissioning at the Customer site.



**Manufacturing Technicians** produce, assemble, and test industrial gas turbines and turbomachinery packages designed to meet specific Customer needs. Manufacturing also arranges shipment of equipment to the Customer site where ...



**Customer Services** handles installation and start-up of the turbo-machinery, trains personnel, and provides a wide range of vital services to support Customer and operating requirements.

**Suppliers** are a critical element of all project teams; they provide materials and components that must meet Solar's demanding Quality Standards.



Courtesy of Solar Turbines, Inc.

The Venezuelan offshore oil and gas platform pictured here is about a \$40 million project for Solar; it includes four sets of turbomachinery. Close coordination among customer, subcontractors, and Solar is required from initial designs through powering up the facility.



Solar's sales and services efforts don't stop when the machine has been turned on. After-sales services (maintenance contracts, overhaul, and spare parts) often account for one-third of some industrial manufacturers' revenues, and Solar is no exception to that rule. Pictured are company overhaul operations in Indonesia.



# Solar's Marketing Affiliates

Solar sells and distributes its products through a variety of kinds of affiliates around the world. Most firms would prefer to keep things simple—direct sales worldwide. However, Solar has learned to be flexible and makes distribution decisions based on the level of business and local regulations.



Delcom is Solar's distributor in Malaysia. Almost all the manufacturing is done in the United States, and Delcom's principal role is marketing in Southeast Asia. Pictured is Delcom's booth at a Malay trade show.



Solar has packaging agreements with three Japanese companies, Mitsui Zosen, Niigata, and Yanmar. The one pictured, Yanmar, buys the turbine engines from Solar, then packages them with generators to suit Japanese regulations and customer specifications.



Solar has a variety of sales and manufacturing operations and affiliations in Mexico, including a maquiladora plant in Tijuana, offices in Mexico City, and a technology-sharing agreement with Turbinas Solar. The last facility is located in Veracruz and is pictured above.



Solar has also signed long-term alliance agreements with some of its major customers like Shell Oil. Pictured here are the Solar and Shell executives who worked on the agreement and then signed it at Solar's San Diego headquarters.

## Summary

Industrial (business-to-business) marketing requires close attention to the exact needs of customers. Basic differences across various markets are less than those for consumer goods, but the motives behind purchases differ enough to require a special approach. Global competition has risen to the point that industrial goods marketers must pay close attention to the level of economic and technological development of each market to determine the buyer's assessment of quality. Companies that adapt their products to these needs are the ones that should be most effective in the marketplace.

The demand for products and services in business-to-business markets is by nature more volatile than in most consumer markets.

The demand also varies by level of economic development and the quality of educational systems across countries. Ultimately, product or service quality is defined by customers, but global quality standards such as ISO 9000 are being developed that provide information about companies' attention to matters of quality. After-sale services are a hugely important aspect of industrial sales. The demand for other kinds of business services (e.g., banking, legal services, advertising) is burgeoning around the world. Trade shows are an especially important promotional medium in business-to-business marketing.

## Key Terms

Derived demand  
Price-quality relationship

ISO 9000s

Client followers

Relationship marketing

## Questions

1. Define the key terms listed above.
2. What are the differences between consumer and industrial goods, and what are the implications for international marketing?
3. Discuss how the various stages of economic development affect the demand for industrial goods.
4. "Industrialization is typically a national issue, and industrial goods are the fodder for industrial growth." Comment.
5. "The adequacy of a product must be considered in relation to the general environment within which it will be operated rather than solely on the basis of technical efficiency." Discuss the implications of this statement.
6. Why hasn't the United States been more helpful in setting universal standards for industrial equipment? Do you feel that the argument is economically sound? Discuss.
7. What roles do service, replacement parts, and standards play in competition in foreign marketing? Illustrate.
8. Discuss the role industrial trade fairs play in international marketing of industrial goods.
9. Describe the reasons an MNC might seek an ISO 9000 certification.
10. What ISO 9000 legal requirements are imposed on products sold in the European Union? Discuss.
11. Discuss the competitive consequences of being ISO 9000 certified.
12. Discuss how the characteristics that define the uniqueness of industrial products lead naturally to relationship marketing. Give some examples.
13. Discuss some of the more pertinent problems in pricing industrial goods.
14. What is the price-quality relationship? How does this relationship affect a U.S. firm's comparative position in world markets?
15. Select several countries, each at a different stage of economic development, and illustrate how the stage affects demand for industrial goods.
16. England has almost completed the process of shifting from the inch-pound system to the metric system. What effect do you think this will have on the traditional U.S. reluctance to make such a change? Discuss the economic implications of such a move.
17. Discuss the importance of international business services to total U.S. export trade. How do most U.S. service companies become international?
18. Discuss the international market environment for business services.