CHAPTER 17
Marketing Globally

OBJECTIVES

After studying this chapter, you should be able to

1. Understand a variety of international marketing strategies/policies and their appropriate circumstances
2. Discuss the pros and cons of product alterations when deciding between standardized and differentiated marketing programs among countries
3. Appreciate the pricing complexities when selling in foreign markets
4. Recognize country differences that may necessitate alterations in promotional marketing practices
5. Comprehend the different branding strategies companies may employ internationally
6. Discern effective practices and complications of international distribution
7. Perceive why and how emphasis within the marketing mix may vary among countries
8. Anticipate the ways that international marketing segmentation may evolve

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Markets have customs and communes have traditions.

—Vietnamese proverb

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CASE Tommy Hilfiger

For it's Tommy this, an' Tommy that
—Rudyard Kipling, "Tommy"

Mark Twain said, "The finest clothing is a person's skin, but, of course, society demands more than this."[1] Tommy Hilfiger, one of the notable international brands within the highly competitive clothing industry, exemplifies efforts to develop and respond to these demands. Retail sales from 90 countries in 2011 were $5.6 billion. Hilfiger has added other lines, but our discussion centers on the clothing brands using the Hilfiger name. Before we examine its international marketing practices, let's look for a moment at the company's description and history.

A BRIEF HISTORY

The early success of the Hilfiger brand was largely due to two men: U.S. designer Tommy Hilfiger and Indian textile magnate Mohan Murjani. Hilfiger designed blue jeans for Jordache, but in 1984, Murjani sought him out to be a designer for Murjani International. As one of the instrumental people in bringing about the designer blue-jeans craze of the 1970s, Murjani wanted to develop a new brand of clothing by offering a line of slightly less preppy and less expensive clothes than those offered by Ralph Lauren that he thought would attract a young mass-appeal audience.

Sales success came quickly for the Hilfiger brand, but Murjani International faced financial problems along with difficulty in separating its attention among its different brands, which it sold to the same department stores. Hilfiger, Murjani, and two other investors bought out Murjani International in 1988 and changed the name to Tommy Hilfiger. In 2009, Phillips-Van Heusen (now PVH) bought the company.

Hilfiger began with only a men's line but has since added women's and children's wear. Tommy Hilfiger's sales outside the United States now account for more than half its world total. Europe accounts for the largest portion of Hilfiger's international sales, although stores are also located in Asia, South America, and the Middle East. The opening photo shows a Tommy Hilfiger store in Berlin, Germany.

PROMOTION AND BRANDING

Hilfiger's promotion and branding have been so intertwined that it is almost impossible to separate them. At the beginning, Murjani saw two primary needs: to convince stores to stock a new brand and to convince customers to want it. Although his ad budget for the first year (1985) was U.S. $1.4 million—quite small for selling in a mass consumer market, especially for an unknown brand—the ads were aimed strictly at getting Tommy Hilfiger's name known. He placed two-page ads in leading magazines and newspapers, along with a billboard in New York's Times Square without showing any clothes or any models. The ads included Hilfiger's face, the logo for the clothes, and words describing him as being on a par with such well-known designers as Ralph Lauren, Perry Ellis, and Calvin Klein.

The ads were so unusual that the brand received free publicity through newspaper write-ups. Even Johnny Carson quipped about Hilfiger on his popular late-night TV show. Within a short time, surveys in New York revealed that people thought of Hilfiger as one of the four or five most important U.S. designers. and the logo-loving public was rushing to buy the brand, while many young managers were eager to be seen in upscale sportswear during the newly popular "casual Friday" workdays.

Early on, Hilfiger received much publicity in newspaper and magazine columns around the world that mentioned or showed celebrities wearing its clothes. An eclectic group, they included Bill Clinton, the Prince of Wales, Michael Jackson, Elton John, and Snoop Dogg. This fed into the image that Hilfiger clothes had cachet; thus the company's image was fairly well established internationally before the company expanded abroad.

Hilfiger has used celebrity advertising, including Sheryl Crow, Jewel, Beyoncé, and the husband-wife team of entertainer David Bowie and supermodel Iman. Film actresses Renée Zellweger and Claudia Gerini and France's first lady Carla Bruni helped the company sell a limited edition bag to support Breast Health International. Bollywood actor Shah Rukh Khan promoted Indian sales. The company has even used "delebs" (dead celebrities), such as Grace Kelly and James Dean. To help advertise its children's line, Disney artists have drawn Pluto and other Disney characters wearing the line. However, aside from celebrities, Hilfiger learned that the type of models it uses to sell merchandise successfully in the United States may not work well in Europe. For example, its models for men's underwear in Europe, including those on point-of-purchase package displays, must be thinner and less muscular than those in the United States. But it augments these thinner models by adding scantily clad, seductive-looking women who stand behind the men in the photos. Hilfiger also found that its average consumer in Germany was older than that in the United States, so it dropped the Tommy Jeans name because it sounded too much like a teen product.

Advertising has been a cornerstone of Hilfiger's success, depending on multimedia campaigns that include print and indoor and outdoor placements. Increasingly, it has depended on digital and social media promotions. In 2013, it introduced its first webisode.

PRODUCT AND PRICE

Although early promotion with the brand name has been instrumental in Hilfiger's success, logo and image are not enough. From the start, Hilfiger clothes have been casual, of good quality, and distinctive enough in color and shape so the public can usually distinguish them from clothing made by competitors (along with the little red, white, and blue logo visibly displayed on most merchandise). Nevertheless, this is an industry in which product lines must evolve. Maintaining that "Fashion brands have to reinvent themselves, just like Madonna does," Hilfiger has gone from preppy to urban and back again.

Hilfiger initially encountered some negative reactions abroad to its image of being a U.S. brand. Although some U.S. clothing products have been well received abroad (such as jeans), many have encountered problems among Europeans who tend to see France and Italy as the upscale fashion centers—an opinion clothing brands from other countries find difficult to overcome. However, Hilfiger has since played up its Americanism, and the perception that the brand and price are a step below the pure luxury brands have successfully helped its European sales find a niche.

In addition, Hilfiger has encountered some differing national preferences. In Germany, for example, its largest European market, men don't mind paying $50 more than the highest-priced Hilfiger shirts in the United States, but they want them in a higher-quality cotton. To accommodate European tastes, Hilfiger has switched to wool sweaters, adjusted to the European preference for slimmer-looking jeans and smaller shirt logos, and created a line of added-luxury items, such as leather jackets and cashmere sweaters for the Italian market.

To make these changes and adapt its look to the European demands, Hilfiger set up a design staff in Amsterdam that includes almost 30 different nationalities. The success in Europe has led to more harmonization in the products offered in the United States and Europe, a move more upmarket in the United States, and a greater dependence on the European design team.

Although its line is clearly identifiable as Hilfiger, the firm makes some adjustments to fit country preferences—brighter colors for Italy, tartans and plaids for Japan, and sleeker designs for Chile.

DISTRIBUTION

In the United States, Hilfiger traditionally relied mainly on wholesaling to about 1,800 department stores, many of which contained stand-alone Hilfiger departments. It has stayed away from chains considered more low-end, such as JCPenney and Sears, though it does sell its outdated stock to discount chains T.J. Maxx and Marshalls. However, in 2007, Hilfiger gave Macy's exclusive rights to sell its sportswear lines. Although Macy's has about 800 stores, the move required Hilfiger to pull sales from other department stores, such as Dillard's.

Distribution is perhaps the biggest difference Hilfiger found when entering Europe. Because the company succeeded in the United States by first going into department stores, it put an early European emphasis on them as well, which led to its entry into such leading chains as Galeries Lafayette in France and El Corte Inglés in Spain. Hilfiger's CEO has described the U.S. market as one of concentration (sending a lot to department stores) and the European market as one of fragmentation (sending small amounts to small stores that carry select pieces). European operational costs are about three times those in the United States because of this more fragmented retail and wholesale system. Hilfiger now has about 5,000 wholesale accounts in Europe—much more than in the United States. On top of that, the margins at the final consumer level in Europe run from 50 to 100 percent higher than at home, with the result that prices for Hilfiger merchandise are much higher in Europe.

Hilfiger entered most Asian countries through licensing agreements; however, as sales grew substantially in China and Japan, it turned to self-ownership within those markets.

In recent years, Hilfiger has inaugurated large flagship stores in prime locations within large markets, such as in New York City, Paris, and Tokyo. These stores serve not only to make sales, but also to demonstrate the variety of merchandise under the Hilfiger label. The foreign stores are decorated to emphasize an American image, while simultaneously connecting the United States to the host country. In the Paris store, this includes a poster of a U.S. magazine with the Eiffel Tower on the cover. By locating in prestige areas, Hilfiger promotes an aura of having high-end products, yet its aim is to be a high-margin brand with prices a notch lower than luxury brands.

There is an old adage that clothes make the man. Hilfiger, while making and selling clothes, has succeeded in convincing customers that its merchandise will help boost (or make) their positions. ■

CRN Case Review Note

QUESTIONS

17-1. The chapter explains five international marketing orientations. Which one most applies to Tommy Hilfiger? Explain why.

17-2. The chapter explains five elements in the marketing mix (product, pricing, promotion, branding, and distribution). In which of these have Tommy Hilfiger's operating practices been the most standardized globally? Explain why this has been possible and desirable.

INTRODUCTION

As the Hilfiger case points out, similar marketing principles apply in domestic and foreign markets and hold that regardless of where a company operates, it must have desirable products and services, tell people about them, and offer them at acceptable prices and accessible locations favored by consumers. However, country differences may cause companies to apply these principles differently abroad, such as by offering product variations to correspond with local preferences—as Hilfiger has done by offering higher-quality cotton for shirts in Germany. Hilfiger's experience also emphasizes the need to find the right balance between the benefits of local responsiveness and the efficiency gains of standardization.

Whatever marketing approach a company takes abroad should be compatible with its overall aims and strategies. This does not imply that it must follow the same strategy for every product or every country. Such factors as cost leadership or differentiation may matter more in some markets than in others. Choosing to follow the same tactics globally may lead to, say, a mass-market orientation in one country and a focused strategy in another. Finally, the degree of global standardization versus national responsiveness may vary within elements of the marketing mix, such as standardizing the product as much as possible while promoting it differently among countries.

Figure 17.1 shows marketing's place in international business. Here, we discuss the application of different marketing strategies to international operations, examine the marketing mix elements of product, pricing, promotion, branding, and distribution, and explain the major factors to consider for each element when operating internationally. Finally, we consider the need to vary the emphasis within the marketing mix to fit the conditions of each country.

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CONCEPT CHECK

Recall that we devote an entire section of Chapter 12 to the issue of "Global Integration versus Local Responsiveness." As we point out, when expanding into foreign markets, a company can save money by standardizing many of its policies and practices and—particularly if it's pursuing a global strategy of expansion— its products. Here we observe that a strategy of marketing standardized products—marketing the same or similar versions to specific global segments—falls at one end of the global integration/local responsiveness spectrum.

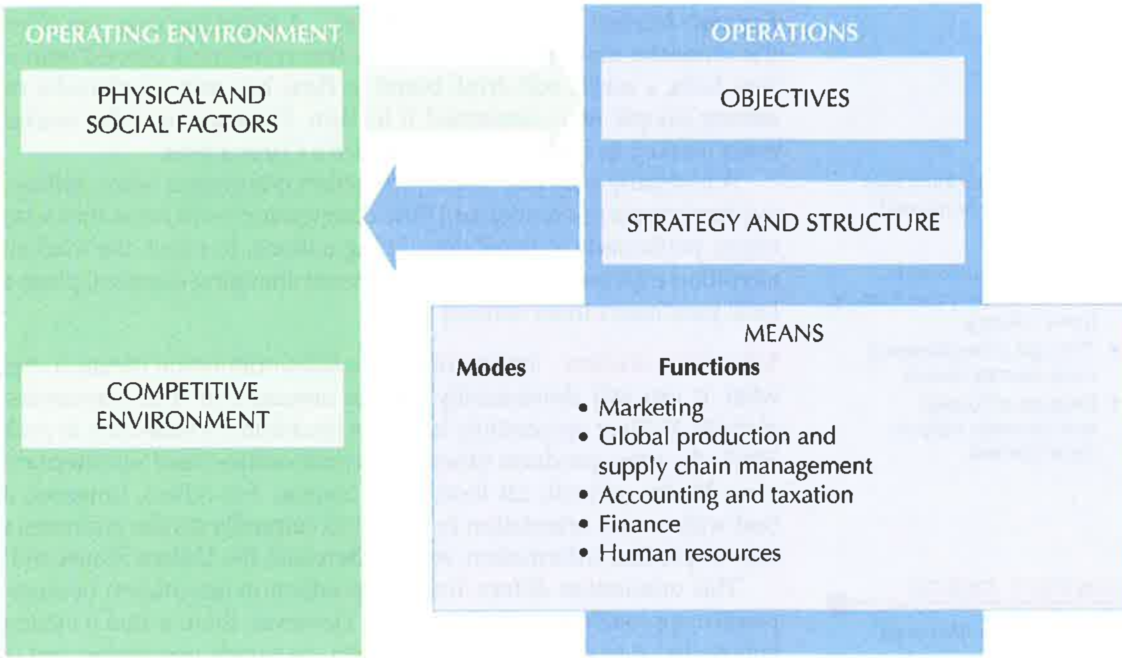
MARKETING STRATEGIES

Overall international marketing strategies should depend on the company's
- Marketing orientation.
- Target market.

We first discuss the worldwide application of the orientations that commonly describe companies' marketing strategies. Keep in mind that they are not entirely mutually exclusive. We then examine market segmentation and targeting and how they relate both to the orientations and to the marketing mix elements. We emphasize product policy in our discussion because it is central to a firm's strategy, whereas the other elements in the marketing mix are supportive to it.[2]

FIGURE 17.1 Marketing as a Means of Pursuing an International Strategy

Recall that we used Figure 15.1 to introduce the various modes and means by which a company can pursue its international objectives and strategy. Among those means we included functions, and here we focus on one of the most important of those functions: *marketing.*



MARKETING ORIENTATIONS

Five common marketing orientations can be applied around the world: *production, sales, customer, strategic marketing,* and *social marketing.* Each is discussed below.

Price is the most important factor in selling many commodities.

Production Orientation A company may focus primarily on production—either efficiency or high-quality—with little emphasis on marketing. Rather than analyzing consumer needs to a high degree, managers assume that customers simply want lower prices or higher quality. Although this approach has largely gone out of vogue, it is used internationally for certain cases:

- *Commodity sales,* especially those for which there is little need or possibility of product differentiation
- *Passive exports,* particularly those that serve to reduce surpluses within the domestic market
- *Foreign-market segments or niches* that may resemble segments targeted domestically

CONCEPT CHECK

In explaining "Commodity Agreements" in Chapter 7, we define commodities as raw materials or primary products (e.g., crude petroleum, copper, coffee). Commodities account for a significant portion of global merchandise trade.

Commodity Sales Companies sell many undifferentiated raw materials and agricultural commodities primarily on the basis of price because of universal demand. However, even for commodities, companies have sometimes had positive international sales results through differentiation that builds favorable consumer perceptions such as with the Chiquita brand on bananas.

In addition, oil producers, such as PDVSA, LUKoil, and Aramco, have bought branded gasoline-distribution operations abroad to help them sell an otherwise undifferentiated product. Commodity producers also put effort into business-to-business marketing by providing innovative financing and ensuring timely, high-quality supplies.

Passive sales occur when foreign buyers seek new products.

Passive Exports Many companies begin exporting very passively by filling unsolicited requests from abroad. At this point, they adapt their products very little, if at all, to foreign consumers' preferences. This suffices for many companies that view foreign sales simply as a means to dispose of excess inventory they can't reasonably sell domestically. In fact, if fixed costs are covered from domestic sales, they can quote lower export prices to liquidate inventories without disrupting their domestic markets.

Foreign-Market Segments or Niches A company may aim a product at a large share of the domestic market and then find a few consumers abroad who are also willing to buy it. Inca Kola, a major soft drink brand in Peru, has only small niche markets abroad, primarily among people who consumed it in Peru. However, a niche market abroad may become a mass market, as is the case with Mexico's Corona beer.

The unaltered product may have appeal at home and abroad

- Because of spillover in product information from its home country,
- Through a simultaneous multi-country launch,
- Because of foreign and domestic input in development.

A company may also use a production orientation when selling in countries with only a minimal market potential and little competition from firms that adapt to local market preferences, particularly in small developing nations. In effect, the market size does not justify the alteration expense—for instance, not even changing electrical plugs to fit local sockets, which local purchasers must convert.

Sales Orientation Internationally, a sales orientation means a company tries to sell abroad what it can sell domestically on the assumption that consumers are sufficiently similar globally. Hilfiger successfully launches its children's collection in multiple countries this way.[3] Similarly, some products other than commodities need no international adaptation, such as razor blades, aircraft, cat food, and cameras. For others, however, a company may succeed best with a sales orientation by selling to culturally similar countries with a great deal of spillover in product information, such as between the United States and Canada.[4]

CONCEPT CHECK

In Chapter 2, we discussed that companies may gain competitive advantages by nurturing cultural diversity. By bringing different nationalities together, usually in teams to handle a specific project, their diverse backgrounds, perspectives, and experiences often enable companies to gain a deeper knowledge of products and services and how to create and deliver them.

This orientation differs from the production orientation because of its active rather than passive approach to promoting sales. However, there is much evidence of foreign-marketing failures because of a mismatch between managers' perception and the reality of what will be accepted abroad,[5] or because they believe heavy sales efforts can overcome negative foreign attitudes. To help alleviate this mismatch, companies may engage product development teams comprising people from different countries to share information so as to create customer solutions that apply globally from the start.[6] Additionally, a strong information exchange between foreign subsidiaries and headquarters can help develop products that can be sufficiently standardized and still fit the needs of consumers in different countries.[7]

A customer orientation takes geographic areas as given.

Customer Orientation In a company that operates according to a sales orientation, management is usually guided by answers to such questions as: Should the company send some exports abroad? Where can it sell more of product X? That is, the product is held constant and the sales location is varied.

In contrast, a customer orientation asks: What and how can the company sell in country A or to a particular type of consumer? In this case, the country or type of consumer is held constant and the product and marketing method vary. An MNE may most likely take this approach because it finds the country's size and growth potential or the consumer type attractive. In an extreme case, it would move to completely different products—an uncommon strategy that some MNEs nonetheless have adopted. Compañía Chilena de Fósforos, a Chilean match producer, wanted to tap the Japanese market because of its growth and size. However, because the company's matches were not price competitive in Japan, it successfully entered the market by making chopsticks, a product that would use its poplar forest resources and wood-processing capabilities.[8]

Business-to-business suppliers may be concerned primarily with promoting their production capabilities, prices, and delivery reliability rather than determining what will sell in foreign markets. Instead, they depend on other companies' purchasing agents to give them product specifications. For example, Hong Kong's Yue Yuen Industrial is the world's largest branded-footwear manufacturer, making athletic shoes to the specifications of companies such as Nike, New Balance, and Adidas.

The most common product strategy is to adapt by degree.

Strategic Marketing Orientation Most companies committed to continual rather than sporadic foreign sales adopt a strategy that combines production, sales, and customer orientations. Companies that don't make changes to accommodate foreign customers' needs may lose too many sales, especially if aggressive competitors are willing to adapt to those needs. At the same time, firms must consider their competencies, lest they deviate too much from what they do well. Thus, they rely on product variations. Hermès, known for its luxury silk products, has introduced limited edition silk saris for the Indian market that sell upwards of \$6,000 each.[9] Thus, Hermès has used its competency in prestige design clothing to produce something that fits the unique Indian market.

Companies consider the effects on all stakeholders when selling or making their products.

Social Marketing Orientation Companies with social marketing orientations pay close attention to the potential environmental, health, social, and work-related problems that may arise when selling or making their products abroad. For instance, Tesco is building "green" stores and has introduced carbon labeling on its products.[10] Such groups as consumer associations, political parties, labor unions, and NGOs are becoming more globally aware—and vocal. They can quell demand when they believe a product somehow violates their concept of social responsibility.

Companies must increasingly consider not only how a product is purchased but also how it is made and disposed of and how it might be changed to be more socially desirable. Such considerations have led Coca-Cola to develop a vitamin-enriched beverage for Botswana, distribute rehydration salts in its packing crates in several countries, and use returnable glass containers for Argentina and Brazil.[11] Our ending case deals with a joint venture that aims to use social responsibility as a competitive advantage.

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SEGMENTING AND TARGETING MARKETS

Companies must decide on their target markets, which may include segments that exist in more than one country.

Seldom can a company convince virtually an entire population to consume its product. Thus, based on the orientations just discussed, companies must segment markets for their products and services and then decide which to target and how. The most common way to do this is through demographics, such as income, age, gender, ethnicity, religion, or a combination of factors (say, a segment consisting of women age 20 to 30 earning \$30,000–\$40,000 per year). Companies may further refine these segments by adding psychographics (attitudes, values, lifestyles). Internationally, there are three basic approaches to segmentation.[12]

CONCEPT CHECK

In Chapter 13, we describe the importance of economic demographic variables in the process whereby companies evaluate and select countries as locations for international operations. Many of the demographic data considered in international marketing decisions are the same. In addressing the question "Will Prime Locations Change?" for example, we point out that while populations in such high-income countries as Japan are declining, those in many developing countries are growing.

By Country Let's say a company decides to go only to the Japanese market for the time being because of its population size and purchasing power. The firm will then need to decide whether to target one or multiple segments there, whether to use the same marketing mix to sell to all segments, whether to tailor the products separately to each segment, and whether to vary the promotion and distribution separately as well. However, although this approach may lead to success in Japan, it overlooks the possible similarities of various Japanese market segments with those in other countries, leaving little opportunity to gain economies through standardization in order to serve market segments that cut across countries.

By Global Segment An MNE may identify some segments around the world, such as those based primarily on some demographic or cultural attributes that transcend countries.[13] Red Bull targets a global, athletically minded, young-adult market.[14] Ferrari targets high-net-worth individuals who want the exclusivity of having a product whose demand exceeds supply.[15] Thus, each country may have some people within the same segment, but the proportional size of each segment will vary by country. Although this may bring about economies of standardization, the company may still need to prioritize by country of entry, delay tapping bigger markets in some countries, and face high entry costs in other countries where the targeted segment is small.

By Multiple Criteria MNEs can combine these choices by looking at countries as segments, identifying segments within each country, and comparing them with those in other countries. They can then determine similarities for targeting the most promising cross-country segments, gain efficiencies through standardization, and still tailor other marketing mix aspects—product offerings, promotion, branding, and distribution—to be compatible with the needs of each country's market.

In effect, a company may hold one or more elements of these marketing functions constant while altering the others. For instance, Chanel aims its cosmetics sales at a segment that transcends national boundaries. It uses branding, promotion, pricing, and distribution globally, but adapts the cosmetics to local ethnic and climatic norms.[16]

Mass Markets Versus Niche Markets At the same time, most companies have multiple products and product variations that appeal to different segments; thus, they must decide which to introduce abroad and whether to target them to mass markets or niche segments. For example, General Motors aims at most income levels in the United States with models ranging in price from its Chevrolet Sonic through its Cadillac Escalade SUV, but it entered China by aiming only at a high-income segment—first with Buicks and later with Cadillacs.

Because the percentage of people who fall into any segment may vary substantially among countries, a niche market in one country may be a mass market in another. An MNE may be content to accept a combination of mass and niche markets; however, if it wishes to appeal to mass markets everywhere, it may need to change elements in its marketing program. U.S.-based Bell South successfully managed to reach a much larger Venezuelan market by selling fewer minutes on phone cards—it added $4 phone cards to the $10 and $20 cards it customarily sold.[17]

PRODUCT POLICIES

Although cost is a compelling reason to globally standardize any part of a company's marketing mix, it is product standardization that generally gains the biggest savings.[18] Nevertheless, product adaptations are common. We now consider the reasons for making them for foreign markets, their costs, the extent and mix of product lines, and product life-cycle considerations.

WHY FIRMS ALTER PRODUCTS

Companies have legal, cultural, and economic reasons for altering their products to fit the needs of customers in different countries. Each is examined in turn below.

Legal factors are usually related to safety or health protection.

Legal Considerations Explicit legal requirements, usually meant to protect consumers, are the most obvious reason to alter products for foreign markets. If you don't comply with the law, you won't be allowed to sell. Pharmaceuticals and foods are particularly subject to regulations concerning purity, testing, and labeling, while automobiles must conform to diverse safety, pollution, and fuel-economy standards.

When standards (such as for safety) differ among countries, MNEs may either conform to the minimum standards of each country or make and sell products fabricated to the highest global standard everywhere. Managers must consider cost along with any ill will that may result by having lower standards in some countries. Critics have complained, for example, about companies' sales abroad—especially in developing countries—of such products as toys, automobiles, contraceptives, and pharmaceuticals that did not meet safety or quality standards elsewhere.

Labeling Requirements One of the more cumbersome product alterations for companies concerns laws on labeling, such as for origin, ingredients, and warnings. Among the different requirements for food product labels are listing any bioengineered content and indicating whether a product is organic or fairly traded. Countries have varying requirements for warnings on cigarette packages (some show gruesome pictures); Australia requires all companies to use the same drab dark brown packages and standardized type for their brand names.[19]

Environmental-Protection Regulations Another problem concerns laws that protect the environment, such as Denmark's onetime ban on aluminum cans and current refundable deposit on them. Other countries restrict the volume of packaging materials to save resources and decrease trash. There are also differences in national requirements as to whether containers must be reusable and whether companies use packaging materials that must be recycled, incinerated, or composted.

Indirect Legal Considerations Indirect legal requirements also affect product content or demand. In some nations, companies cannot easily import certain raw materials or components, forcing them to construct an end product with local substitutes that may substantially alter the final result. Legal requirements such as high taxes on heavy automobiles also shift companies' sales to smaller models, thus indirectly altering demand for tire sizes and grades of gasoline.

Point

Should Home Governments Regulate Their Companies' Marketing in Developing Countries?

Point **Yes** MNEs advertise, promote, and sell products in developing markets that their home countries have banned. If we've made a decision not to sell these products domestically because of their dangers or ethical implications, we have a moral obligation to prevent the same consequences abroad. This statement may smack of extraterritoriality, but let's face it: Too many consumers in developing countries lack the education and reliable information to make intelligent decisions about products, and/or they are saddled with corrupt political leaders who don't look after their interests. We must ensure that they spend on needs rather than on wants engendered by MNEs' clever promotion programs. If developed countries don't regulate to protect consumers in developing countries, who will?

Companies also export products that don't meet quality standards at home or are potentially dangerous. Take DDT: It's so dangerous to the environment that all developed countries banned its use, but they allowed production and export for years afterward. Or consider battery recycling: Developed countries have pretty much abandoned that business because of strict antipollution requirements to prevent lead poisoning, which shows up only after slow, cumulative ingestion through the years. So now companies export the batteries to developing countries that have either weak or weakly enforced pollution laws.[20]

With the World Health Organization (WHO) estimating that tobacco is the leading cause of preventable death in the world, we have also attempted to limit tobacco use through warning labels and ads, restrictions on sales to minors, and smoking bans in certain public areas. While tobacco use has been declining in developed countries, it is burgeoning in developing ones, especially those in Africa, where tobacco companies have increased their promotions.[21]

There are also examples of products suitable for most customers in the developed world but not for poorer countries. The most famous case involves infant-formula sales, in which infant mortality rates rose in developing countries when bottle-feeding supplanted breast-feeding. Because of low incomes and poor education, mothers frequently over-diluted formula and gave it to their babies in unsanitary conditions. And the governments did little to stop the sales. Global publicity about the situation led WHO to pass a voluntary code to restrict formula promotion—but not sales—in such areas. Critics hit Nestlé hardest because it had the largest share of infant-formula sales in developing countries and because its name-identified products facilitated the organization of a boycott. Nestlé ceased advertising that could discourage breast-feeding, limited free formula supplies at hospitals, and banned personal gifts to health officials.[22]

MNEs also pay too little attention to the needs of consumers in developing markets. Instead, they primarily create products suitable to the needs of wealthier consumers who can afford them, but superfluous for low-income consumers, to whom MNEs introduce and promote them heavily. Thus, the poor end up buying products they don't need instead of spending their money on nutritional and health items. Bottled water, sold mainly in plastic bottles by such companies as Nestlé, Danone, Coca-Cola, and PepsiCo, is an example. It is often no better than tap water (in fact, it often *is* tap water), but it sells for 10,000 times more in bottles that are thrown out and take 1,000 years to biodegrade.

Finally, MNEs spend little to make products to fit the needs of developing countries. Consider that little of the global health research budget is spent on diseases that account for most of the global disease burden—mainly those that largely bypass developed countries.[23] Instead of spending heavily on life-threatening illnesses like malaria, Chagas disease, and sleeping sickness, they spend on lifestyle treatments, such as penile erectile dysfunction and baldness. The U.S. Food and Drug Administration (FDA) did institute an incentive in 2008—faster approval of potential "blockbuster drugs"—for pharmaceutical companies that research previously neglected diseases. However, there is skepticism about whether faster approval is enough of an incentive.[24] Surely we can find the regulatory means to force companies to meet real needs in the developing world rather than concentrating on selling dangerous and superfluous products there.

Should Home Governments Regulate Their Companies' Marketing in Developing Countries?

Counterpoint

No The answer here is education rather than limiting people's choices by regulating MNEs. In fact, there are many examples of behavior change in both consumers and governments when they learn the facts. Pakistan, for instance, has taken a number of actions to restrict tobacco use.[25]

Your argument that products banned at home should not be sold abroad assumes that the home government knows best. This may reflect a difference in morals rather than a problem of creating physical danger. For instance, some countries have banned the sale of the morning-after pill RU-486 on moral grounds. But to ban sales in other countries that accept a different morality would smack of cultural imperialism.

Conditions between rich and poor countries are sometimes so different that they need different regulations. Take your example of DDT exports. Developing countries are aware of DDT's adverse long-term effect on the environment, but in the short term many of them face a malaria crisis. When South Africa was persuaded to ban the use of DDT and turned instead to a different pesticide, the number of new malaria cases tripled in four years; renewing DDT spraying brought that number down again.[26] Until there is a better solution for malaria, DDT bans will do more harm than good. Certainly, if one government has found a product dangerous, it should pass on this information to other governments; in terms of DDT and toxic materials exports, this is already being done.

Yes, tobacco companies are promoting more heavily in developing countries. Keep in mind, though, that a good part of that promotion is for smokeless tobacco products, which are safer than cigarettes and can help smokers stop.[27] However, if other governments were to limit their companies' sales or promotion of tobacco, their citizens would still be able to buy it. Many developing countries have indigenous tobacco companies, some of which are even government-owned, such as the China National Tobacco Company.

The infant formula situation truly shows the complexity of this issue. Other factors also influenced the rise in bottle-feeding—specifically, more working mothers and fewer products and services originating in the home.

Counterpoint

Together, they led to feeding babies "home brews" that, sadly, were also often unsanitary. Promoting infant formula may simply have persuaded them to give up the home brews in favor of the most nutritious breast-milk substitute available. Moreover, well-intentioned anti-formula groups succeeded in replacing bottle-feeding with breast-feeding. However, the HIV virus is transmitted through breast milk—a particular problem in HIV/AIDS-plagued southern Africa.[28] This starkly shows the futility of trying to legislate what is good for people.

How far can we go to try to protect people? Obesity, considered a growing health problem in the developed world, is being attacked through education—the same way we should attack problems in developing countries. I can't imagine a widespread rationing or banning of sugars, fats, and carbohydrates. Certainly, products such as soft drinks and bottled water seem superfluous when people are ill-nourished and in poor health. But the lack of access to sanitary water is one of the world's biggest health problems, which the sale of soft drinks and bottled water are helping in the short term. In a longer term, Coca-Cola is working to distribute small scale purifying systems to mitigate the problem.[29] Moreover, there is no clear-cut means of drawing a line between people who can and can't afford these so-called superfluous products.

Companies *do* alter products to fit the needs of poor people—everything from less expensive packages to less expensive products. The pharmaceutical firms you criticized for not attacking low-income health needs spend heavily to find solutions to diseases that attack all people, such as cancer and diabetes. In fact, they have seen, and expect to see, huge prescription drug growth in emerging markets.[30] However, they must recoup their expenses if they are to survive, so they concentrate on drugs for which they can be paid. Governmental research centers and nonprofit foundations are better candidates for solving the developing countries' health problems. Some are working jointly with pharmaceutical firms to find solutions, while the National Institutes of Health (NIH) in the United States has instituted a program to find treatments for some of the 6,800 diseases for which there is likely insufficient revenue to recoup research expenditures.[31]

Although some standardization of products would eliminate wasteful alterations, there is resistance because

- A changeover would be costly.
- People are familiar with the "old."

Issues of Standardization A recurring issue is the need to arrive at international product standards and eliminate some of the wasteful product requirements for alterations among countries. Although governments have reached agreements on some products (technical standards on mobile phones, bar codes to identify products), other products (railroad gauges, power supplies) continue to vary. A global standard has usually resulted from companies wanting to emulate a dominant producer, such as making blades to fit Gillette razors.

In reality, there is both consumer and economic resistance to standardization—such as the U.S. reluctance to adapt to the metric system. Economically, a complete changeover would be more costly than simply educating people and relabeling. Containers would have to be redesigned and production retooled so that sizes would be in even numbers. (Would U.S. football have a first down with 9.144 meters to go?) Even for new products or those still under development, companies and countries are slow to reach agreement because they want to protect the investments they've already made. At best, international standards will come very slowly.

Examination of cultural differences may pinpoint possible problem areas.

Cultural Considerations Religious differences obviously limit the standardization of product offerings globally, such as food franchises limiting sales of pork products in Islamic countries and meat of any kind in India. However, cultural differences affecting product demand may not be so easily discerned. Toyota initially failed to sell enough pickup trucks in the United States until it redesigned the interior with enough headroom for drivers to wear cowboy hats. Home Depot pulled out of the Chinese market after discovering that it could not overcome consumers' preference for hiring people to do jobs rather than embracing the do-it-yourself concept.[32] International food marketers substantially alter ingredients (especially fat, sodium, and sugar) to fit local tastes and requirements, such as Kellogg's All-Bran bar having three times as much salt in the United States as in Mexico.

Personal incomes and infrastructures affect product demand.

Economic Considerations

Income Level and Distribution If a country's average consumers have low incomes, few of them may be able to buy products that MNEs sell domestically. But this creates an opportunity to sell to those with sufficient income while designing cheaper alternatives for those with lower incomes. In Peru, Unilever sells deodorants in aerosol cans to more affluent consumers and small containers of cream sachet to those with lower incomes. Often, consumers buy personal items in small quantities as they use them usually because of low incomes, but also because of difficulty in transporting and storing large amounts. In another Peruvian example, Kimberley Clarke sells Huggies (disposable diapers) in regular boxes along with a single Huggies in a small package.[33] Diageo and SABMiller have lowered beer prices in several African countries by brewing with local ingredients such as yams and convincing governmental authorities to remove excise taxes because of the agricultural jobs created by the ingredient change.[34] When segmenting sales to different economic levels, a company may need to differentiate its products with different brand names, such as what Procter & Gamble does in China with both a Duracell and Nanfu brand of batteries.[35] The adjacent photo shows a high-frequency store catering to the type of consumer who buys in small quantities.

CONCEPT CHECK

In Chapter 13, we list the factors that companies consider when "scanning" potential overseas locations to determine what conditions in the host country's environment are likely to affect the success of international operations. Under "Cost Considerations," we point out that poor internal infrastructure inflates operating costs and can in fact negate cost savings afforded by low labor rates.

Infrastructure Poor infrastructure may also require product alterations, such as the ability to withstand rough terrain and utility outages. The washing machine models Whirlpool sells in remote areas of India have rat guards to protect hoses, extra-strong parts to survive transportation on potholed roads, and heavy-duty wiring to cope with electrical ebbs and surges.[36] Japan, despite having an excellent infrastructure, is characterized by crowded conditions and high land prices. Some large foreign automobile models are too wide to fit into elevators that carry cars to upper floors to be parked, or to make narrow turns on back streets.

ALTERATION COSTS

Some alterations cost less than others.

Companies can usually cut production and inventory costs through product standardization. Nevertheless, as you've just seen, there can be compelling reasons to alter products for different national markets. Some alterations, such as package labeling, are cheaper to make than others, such as designing a different car model. Further, some will do more to increase sales than others, thus companies need to evaluate the potential cost savings versus sales generation for each type of change.[37] However, even packaging changes may necessitate costly research if the aim is to convey a particular product perception to a target market with different characteristics than

High-frequency stores in developing countries, including this one in the Guatemalan highlands, often crowd small packages into small areas to serve customers who shop frequently because they cannot afford to buy, transport, or store in large quantities.

Source: © Jon Crwys-Williams / Alamy

those at home. For example, there is evidence that packaging can partially sway consumers in buying decisions, but the image needed to do this may differ by target market.[38]

MNEs can compromise between uniformity and diversity by standardizing products a great deal while altering some components. Whirlpool does this by putting the same basic mechanical parts in all its refrigerators while changing such features as doors and shelves for different countries.[39]

THE PRODUCT LINE: EXTENT AND MIX

Broadening the product line may gain distribution economies.

When introducing a full range of its products abroad, a firm's percentage share for each product commonly differs from those in its home country. For instance, a tire manufacturer may sell all its tire sizes everywhere, but the share for each size depends on automobile models in each market. Cultural factors may also be important. Most of Nike's shoes for specialty sports have sold well in China, but not its running shoes because running there is associated with unpopular school exercising programs and with people being chased.[40]

In many other cases, it is doubtful that all of an MNE's multiple products could generate sufficient sales to justify the cost of penetrating each market with each product. Even if they could, the company might offer only a portion of its product line, perhaps as an entry strategy or because of limited space and high inventory costs when handling a very broad product line. Walmart's Canadian stores, for instance, have only 20 percent of the merchandise available in its U.S. stores.[41]

Sales and Cost Considerations In reaching product-line decisions, managers should consider the possible effects on sales and the cost of having a large versus small family of products. Sometimes a firm must produce and sell a wide variety of products to gain distribution with large retailers. Further, if the foreign sales per customer are small, selling costs per unit may be high because of the associated fixed distribution costs. In such a case, the company can broaden the product line it handles, either by introducing a larger family of products or by grouping sales of several manufacturers.

Product Life-Cycle Considerations Countries may differ in either the shape or the length of a product's life cycle. Thus, a product facing declining sales in one country may have growing or sustained sales in another. Consider cars: They are a mature product in Western Europe, the United States, and Japan, in the late growth stage in South Korea, and in the early growth stage in India. At the mature stage, automobile companies must emphasize characteristics that encourage people to replace their still-functional cars, such as lifestyle, speed, and accessories. In the early growth stage, they need to appeal to first-time buyers who worry about cost, so they emphasize fuel consumption and price.[42] Firms must also consider competition from other products. Best Buy closed its Chinese operations largely because consumers put off buying the electronics in which it specialized, such as stereos and large flat-screen TVs, in order to buy large appliances, such as washing machines and refrigerators.[43]

PRICING STRATEGIES

Within the marketing mix, a price must be low enough to gain sales but high enough to guarantee the flow of funds required to cover such expenses as R&D, production, and distribution. A competitive strategy, such as cost leadership versus product differentiation, also affects pricing decisions. The proper price not only ensures short-term profits but also provides the resources necessary to achieve long-term competitive viability.

POTENTIAL OBSTACLES IN INTERNATIONAL PRICING

Pricing is more complex internationally than domestically because of various factors that we'll now examine.

Governmental price controls may

- Set minimum or maximum prices.
- Prohibit certain competitive pricing practices.

Government Intervention Every country has laws that affect the prices of goods, such as price controls. Minimum prices are usually set to prevent companies from eliminating competitors and gaining monopoly positions or may be set simply to maintain an industry. Maximum prices are usually set so that poor consumers can buy products and services.

The WTO, under its antidumping regulations, permits countries to establish restrictions against any import entering at a price below cost. But why would a company wish to sell below its cost? First, it may want to induce customers to try a product, such as by offering a low price or even free samples. Second, it may be testing the market. Nestlé did this when it exported Lean Cuisine products from Canada to the United Kingdom at a price below cost, then sold them temporarily at the consumer price it would charge if it produced them in the United Kingdom. The loss was small compared to the value of the information gained and the amount of Nestlé's eventual commitment. However, antidumping regulations may prevent companies from fully utilizing the advantages from such temporary below-cost selling.

Consumers in some countries simply like certain products more and are willing to pay more for them.

Market Diversity Although a company can segment the domestic market and charge different prices in each segment, country-to-country variations create even more natural segments. A seafood company would sell few sea urchins or tuna eyeballs in the United States at any price, but it can export them to Japan, where they are considered delicacies.

Pricing Tactics In some places, a company may have many competitors and thus little discretion in setting its prices. Elsewhere, a near-monopoly situation may allow it to exercise considerable pricing discretion by using any of the following tactics:

- A **skimming strategy**—charging a high price for a new product by aiming first at consumers willing to pay that much, then progressively lowering the price to sell to other consumers
- A **penetration strategy**—introducing a product at a low price to induce a maximum number of consumers to try it
- A **cost-plus strategy**—pricing at a desired margin over cost

Country-of-origin stereotypes also limit pricing possibilities. For example, exporters in developing economies must often compete primarily through low prices because of negative perceptions about their products' quality. The danger is that a lower price may weaken the product image even further.

Cash versus credit buying affects demand.

Diversity in buying on credit affects sales, especially through impulse buying.[44] Credit buying raises costs and may also give some individuals a feeling of insecurity by incurring debt. They may also forgo purchases because of a preference to save. On average, consumers in some countries, such as Japan, are less willing to undertake debt than consumers in other countries, such as the United States. In the former, it is harder to generate sales by offering credit.

CONCEPT CHECK

In discussing "Export Strategy" in Chapter 14, we discuss the importance of export intermediaries in the international business transaction chain and explain their place in a carefully considered export business plan. In turning to "The Export Process," we describe the process of indirect selling and explain the central role of home-country intermediaries—independent companies that facilitate the international trade of goods.

Export Price Escalation If standard markups occur within distribution channels, lengthening the channels or adding expenses somewhere in the system will further raise the price to the consumer—a situation known as *export price escalation.* If a product's markup is 50 percent and its production cost is $1.00, the price to the consumer would be $1.50. However, if expenses in the system, such as extra transport expenses, were to raise costs to $1.20, the 50 percent markup would make the price $1.80, not $1.70 as might be expected.

Figure 17.2 shows price escalation in export sales, which occurs for two reasons:

1. Channels of distribution usually include additional intermediaries because exporters need to contract with organizations that know how to sell in foreign markets.
2. Tariffs and transport are added costs that may be passed on to consumers.

Price generally goes up by more than incremental costs for transport and duty.

There are two main implications of price escalation. Seemingly exportable products may turn out to be noncompetitive abroad if companies use cost-plus pricing—which many do. To become competitive in exporting, a company may have to sell its product to intermediaries at a lower price to lessen the amount of escalation.

CONCEPT CHECK

We define foreign exchange in Chapter 9 as the currency of one country denominated in the currency of another country or group of countries. We point out that most foreign-exchange transactions stem from the activities of commercial banks, but we also observe that exporters and importers are players on the foreign-exchange market and explain how such factors as exchange rates affect certain international business activities, especially the process of making foreign payments.

Fluctuations in Currency Value For companies accustomed to operating with one (relatively) stable currency, pricing in highly volatile currencies can be extremely troublesome. Managers should price to ensure the company enough funds to replenish its inventory and still make a profit. Otherwise, it may be making a "paper profit" while liquidating itself—that is, what shows on paper as a profit may result from the failure to adjust for inflation while the merchandise is in stock.

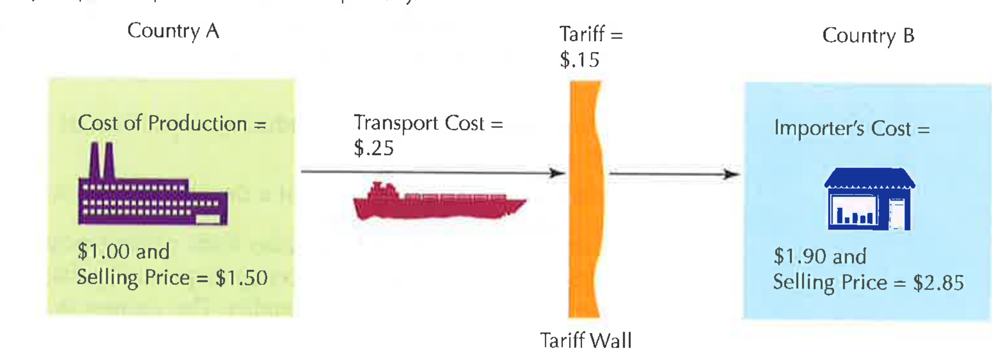
Two other pricing problems occur because of inflationary conditions:

1. The receipt of funds in a foreign currency that, when converted, buy less of the company's own currency than had been expected
2. The frequent readjustment of prices necessary to compensate for continual cost increases

In the first case, the company sometimes (depending on competitive factors and governmental regulations) can specify an equivalency in some hard currency in sales contracts. For example, a U.S. firm's sale to a company in Venezuela may specify that payment be made in dollars or in bolivars at an equivalent price in terms of dollars at the time payment is made.

FIGURE 17.2 Why Cost-Plus Pricing Pushes Up Prices

Let's say that a product is being exported from Country A and imported into Country B for purchase by consumers there. Let's also say that both the producer/exporter and the importer/distributor tack on 50 percent markups to the prices they pay for the product. If you add in the costs of transport and tariffs, the product is substantially more expensive in Country B than in Country A—perhaps too expensive to be sold competitively.



In the second case, frequent price increases may hamper the ability to quote prices in letters or catalogs, or even what the company would otherwise prefer for distribution. For instance, price increases in vending-machine sales are often difficult because of the need to recalibrate machines and come up with coins or tokens that correspond to the new prices. Another alternative is to change the product's quality, which few firms are willing to do, or its size, which is what Coca-Cola did to its soft-drink cans in Hong Kong when aluminum prices rose.[45]

Currency-value changes also affect pricing decisions for any product that has potential foreign competition. For example, when the U.S. dollar is strong, companies can sell non-U.S.-made goods more cheaply in the U.S. market because their prices in dollars decrease. In such a situation, U.S. producers may have to accept a lower profit margin to be competitive. When the dollar is weak, however, producers in foreign countries may have to adjust their margins downward.

When companies sell similar goods in multiple countries, price differences among them must not greatly exceed the cost of bringing the goods in from a lower-priced country, or spillover in buying will occur. Ice cream manufacturers, let's say, can vary their prices by a large percentage from country to country because the transportation costs compared to product price render large-scale movements across borders impractical. However, if the transportation costs compared to price are low, consumers can feasibly buy abroad and import when prices vary substantially from country to country.

The Gray Market The **gray market**, or **product diversion**, is the selling and handling of goods through unofficial distributors. Such unauthorized selling can undermine the longer-term viability of the distributorship system, induce a company's operations in different countries to compete with each other, and prevent companies from charging what the market will bear in each country. Let's say a firm's product is sold in Asia at a lower price than in the United States because of different market conditions. If an unauthorized distributor buys it in Asia and resells it at a lower price in the United States, the U.S. seller either loses sales or can no longer sell at the price the market will bear. One consulting firm estimates that U.S. companies lose $63 billion a year because of the gray market.[46] Traditionally, publishers sold texts at substantially different prices in different countries, but a U.S. Supreme Court ruling said it is legal to buy lower-priced textbooks abroad to re-sell in the United States. In essence, maintaining price differences among countries has become more difficult as consumers have gained access to more global information because of sources like the Internet and more access to buying abroad because of factors like lower trade barriers and more foreign travel.

There are country-to-country differences in

- Whether prices are fixed or bargained in stores.
- Where bargaining occurs.

Fixed Versus Variable Pricing MNEs often negotiate their export prices with importers. Small firms, especially those from developing countries, frequently give price concessions too quickly, limiting their ability to negotiate on a range of marketing factors that affect their costs:

- Discounts for quantity or repeat orders
- Deadlines that increase production or transportation costs
- Credit and payment terms
- Service
- Supply of promotional materials
- Training of sales personnel or customers

Table 17.1 shows ways in which an exporter (or other marketers as well) may deal more effectively in price negotiations.

Some people, regardless of culture, avoid price negotiation even when they know they may gain economically by doing so, such as because they fear the loss of face.[47] This could occur because of fear of being perceived as too aggressive or too poor. Other explanations include not wanting to take the time and preferring to develop long-term relationships that bargaining might upset. Regardless of cause, there is a substantial variation in whether,

TABLE 17.1 Negotiating Import-Export Prices

Exporters export because they want to sell their products in foreign markets, and pricing is a key factor in selling products profitably. MNEs and other veteran exporters have learned that negotiating prices—both their own and those of their import partners—is an effective way of considering all the factors that should go into pricing decisions.

The goal is to delay a pricing commitment while discussing a whole package of other commitments.

Importer's Reaction to Price Offer	Exporter's Response
1. Your offer is too expensive.	- Ask what is meant by too expensive. - Find out what is considered acceptable and on what basis. - Respond by providing justification. - Avoid lowering your price until you learn more about what the other party is looking for. - Find out if the objection is due to your price offer or if it reflects other factors. - Ask yourself, "If I'm too expensive, why are they negotiating with me?"
2. We don't have that kind of budget.	- Find out how large the budget is and for what time frame. - Explore whether your offer can fit within the overall budget by combining several budget lines. - Propose deferred-payment schedules. - Confirm the order and postpone deliveries until a new budget is allocated. - Split your order into smaller units or mini-orders to meet current budget limitations.
3. That's not what we are looking for.	- Ask what they are looking for, and insist on specifics. - Keep questioning until you understand the real needs. - Repackage your offer in light of the new information received.
4. Your offer is not competitive.	- Ask what "not competitive" means. - Find out if competitors' offers are comparable to yours. - Find weaknesses in other offers and emphasize your strengths. - Reformulate your offer by avoiding direct comparison with competition. Stress the unique features of your products/services.

Source: Business Negotiations: Making the First Offer by Claude Cellich ©International Trade Centre, International Trade Forum, Issue 2/2000.

where, and for what products consumers bargain in order to settle on an agreed price. In the United States, consumers commonly bargain for automobiles, real estate, and large orders of industrial supplies but not for grocery items. However, some auto dealerships sell only on a fixed-price basis, while bargaining for smaller items is growing, as the Internet allows consumers to confront distributors with easily obtained alternative prices. In contrast, consumers in most developing countries commonly bargain for both large and small items, but more routinely in traditional markets than in retail stores.[48]

Supplier Relations Dominant companies with clout can get suppliers to offer lower prices, thereby gaining cost advantages over competitors. But they may lack this clout in foreign markets because of not being dominant there. Walmart, Marks & Spencer, and Carrefour have such clout in their respective domestic United States, United Kingdom, and French markets, but they have been hard pressed to gain the same advantage when entering the others' home markets.

The Internet is also causing more companies to compete for the same business, especially for sales of largely undifferentiated materials. Thus, many industrial buyers are claiming large price decreases through Internet buying. However, sellers can improve their positions by negotiating and by combining the Internet with face-to-face interaction.[49]

PROMOTION STRATEGIES

Promotion is the presentation of messages intended to help sell a product or service. The types and direction of messages and the methods of presentation may be extremely diverse, depending on the company, product, and country of operation.

THE PUSH-PULL MIX

Promotion may be categorized as **push**, which uses direct selling techniques, or **pull**, which relies on mass media. Most companies use combinations of both. For each product in each country, a company must determine its total promotional budget as well as the mix between push and pull. The photo in Tokyo shows pull ads by a number of Japanese and international companies.

Push is more likely when

- Self-service is not predominant.
- Advertising is restricted.
- Product price is a high portion of income.

Factors in Push-Pull Decisions

Several factors help determine the mix of push and pull among countries:

- Type of distribution system
- Cost and availability of media to reach target markets
- Consumer attitudes toward sources of information
- Price of the product compared to incomes

Generally, the more tightly controlled the distribution system, the more likely a company is to emphasize a push strategy to distributors because it requires a greater effort to get them to handle a product. This is true where most distributors can carry few brands because they are small and highly fragmented, thereby forcing companies to concentrate on making their goods available.

Also affecting the push-pull mix is the amount of contact between salespeople and consumers. In a self-service situation, in which customers have few or no salespeople to turn to for opinions on products, it is more important for the company to use a pull strategy by advertising through mass media or at the point of purchase.

Most large cities have areas with large numbers of neon signs advertising products from both domestic and international companies. The photo shows such signs in the Shinjuku area of Tokyo, Japan.
Source: © STEVE DUCHESNE/Fotolia

Finally, consumers react to word-of-mouth opinions, especially where uncertainty avoidance is high.[50] Thus companies need to establish appropriate means to persuade existing customers that their purchases have been of high quality and at reasonable prices, such as by providing after-sales support and service. Social media platforms are rapidly becoming more important in conveying independent experiences for products and services because they allow users to interact, such as by rating their recent hotel stays and sharing information about their experiences.

SOME PROBLEMS IN INTERNATIONAL PROMOTION

Because of diverse national environments, promotional problems are quite varied and often problematic. For example, over 50 percent of China's population is rural, most are poor, and many lack access to traditional media to view advertisements. Thus, PC makers such as Lenova and Hewlett Packard promote in rural areas by providing variety shows and films to demonstrate their products. They also demonstrate at rural markets where customers visit a few times per month.[51] In rural Nigeria, Kuwait's Mobile Telecommunications Company found that its billboards were stolen to use in construction and that its direct marketers faced too many dangers. The company then turned successfully to small shop owners—tailors, retailers, etc.—and established a mini-franchise system with them.[52]

In many countries, government regulations pose an even greater barrier, such as in Scandinavia where television cannot broadcast commercials aimed at children. In China, ads cannot interrupt dramas, thus they are all bunched together between shows, which companies claim make the ads less effective. Other countries may put legal constraints on what a company says. For instance, the United States and New Zealand allow pharmaceutical firms to advertise prescription drugs directly to consumers, but European countries and Australia do not. Thus, in the former countries, pharmaceutical companies describe physical symptoms, such as erectile dysfunction, in television ads and tell viewers to ask their physicians about a particular brand, such as Viagra or Cialis. However, Pfizer's and Eli Lilly's European ads simply tell TV viewers, without mentioning their brands, to talk with their physicians about erectile dysfunction.[53]

Finally, when a product's price compared to consumer income is high, consumers will usually want more time and information before making a decision. In these situations, information is best conveyed in a personal selling situation that fosters two-way communication. Thus, in developing economies MNEs will often use push strategies for more products because of lower incomes.

Advantages of standardized advertising include

- Some cost savings,
- Better quality at the local level,
- A common image globally,
- Rapid entry into different countries.

CONCEPT CHECK

In Chapter 2, we emphasize that the effort to apply language practices across cultures can have an entirely different effect. We discuss why internationally minded companies should be careful in translating a message conceived in one language into a message to be delivered in another. We also emphasize that words may have different meanings even among countries using the same language. As for advertising in visual media, we also discuss a variety of potential pitfalls in "Silent Language"—nonverbal communication ranging from body language to the use of colors.

Standardization: Pro and Con There are cost savings from using the same advertising programs among countries. In addition, advertising standardization may improve the quality of ads at the local level (because local agencies may lack expertise), prevent internationally mobile consumers from being confused by different images, and speed the entry of products into different countries.

However, globally standardized advertising usually refers to a program that is *similar* from market to market rather than one that is *identical* in each. An example is Red Bull's ad campaign that focuses on different sports in different countries.[54] Standardization also usually implies using the same ad agency globally. By doing this, MNEs such as IBM, Colgate, and Tambrands can take good ideas from one market and quickly introduce them into others without worrying about legal and ethical problems over agency copying. Other companies, like Procter & Gamble, prefer to use more than one agency to keep them in a state of perpetual competition and to cover one agency's weak spots by drawing on the ideas of another.

Finally, the issue of standardization in advertising raises problems in a few other areas—namely, *translation, legality,* and *message needs.*

Translation When media reach audiences in multiple countries, the ads cannot be translated because viewers watch the same transmission. An additional problem is that the product may not be available everywhere it is advertised.

When a company is going to sell in a country with a different language, translation is usually necessary unless the advertiser is trying to communicate an aura of foreignness. The most audible problem in commercial translation is dubbing because words on an added sound track never quite correspond to lip movements. Companies can avoid this problem by creating commercials in which actors do not speak and add a voice or print overlay in the appropriate language.

Another type of advertisement dubbing involves product placement in books, movies, and television shows, especially those that are widely distributed internationally. Again, the product may not be available everywhere. So technology now permits the products to be removed and replaced for given markets. *Spider-Man 2* had Cadbury Schweppes's Dr. Pepper logo on a refrigerator for U.S. screenings and PepsiCo's Mirinda logo in Europe.[55]

On the surface, translating a message would seem to be easy. However, some messages, particularly plays on words, simply don't translate—even between countries that have the same language. Sometimes an acceptable word or direct translation in one place is offensive, misleading, or meaningless in another. In an Apple commercial, the U.S. version used the word "doozy" and the U.K. version used the word "humdinger." Another issue lies in choosing the language when a country has more than one, such as using Creole in Haiti to reach the general population but French to reach the upper class.

Legality What is legal advertising in one country may be illegal elsewhere. The differences result mainly from varying national views on consumer protection, competitive protection, civil rights promotion, standards of morality and behavior, and nationalism. For example, there are many products that some societies view as being in sufficiently bad taste that they restrict their advertising.[56]

In terms of consumer protection, policies differ on the amount of deception permitted and what can be advertised to children. The United Kingdom and the United States allow direct comparisons with competitive brands, while the Philippines prohibits them. Only a few countries regulate sexism in advertising. Elsewhere, governments restrict ads that might prompt misbehavior or law-breaking (such as promoting automobile speeds that exceed the speed limit), as well as those that show barely clad women.[57]

Message Needs An advertising theme may not be appropriate everywhere because of country differences in consumers' product awareness and perception, the people who make the purchasing decision, and what appeals are most important. At one time fewer Italians owned dishwashers than you would have expected from Italian income levels because the housewives felt that buying for the sake of convenience reduces cleanliness; hence, a group of dishwasher manufacturers teamed up to advertise that dishwashers clean better because they use hotter water.[58] Because of economic differences, Home Depot promotes its U.S. stores by appealing to hobbyists, whereas in Mexico it promotes the cost savings for do-it-yourselfers.[59]

The reaction to how messages are presented may also vary. Leo Burnett Worldwide produced a public service ad to promote breast exams that showed an attractive woman being admired in a low-cut sundress, with a voice-over message saying, "If only women paid as much attention to their breasts as men do..." Japanese viewers found this a humorous way to draw attention to breast cancer, whereas French viewers found it offensive because cancer should not be viewed humorously.[60] Given the increase in television transmissions that reach audiences in multiple countries, advertisers must find common themes and messages that will appeal to potential consumers everywhere their ads are viewed.

BRANDING STRATEGIES

A *brand* is an identifying mark for products or services. A legally registered brand is a trademark. A brand gives a product or service instant recognition and may save promotional costs. From a consumer standpoint, it conveys a perception of whether firms will deliver what they promise; however, the importance is more crucial in countries with strong cultural characteristics of uncertainty avoidance.[61]

CRN
Case Review Note

The importance of brand can be illustrated by comparing examples of two companies. Our opening case illustrates how Tommy Hilfiger built a following for its brand even before consumers were familiar with its product offerings. In contrast, Chinese appliance maker Haier has had trouble with U.S. sales because its brand name is not well-known in the United States.[62]

Keep in mind, though, that a company may use the same brand globally while altering the brand image for different markets. For example, individualistic cultures offer greater advantages in creating an image of innovativeness than collectivist cultures. However, within the latter, images of social responsibility apparently contribute more to brand commitment than in the former.[63]

Because companies have spent heavily in the past to create brand awareness, *Marketing Week* estimates that 79 global brands in 2012 were worth at least $10 billion. U.S. companies accounted for 39 of the top 100.[64]

WORLDWIDE BRAND VERSUS LOCAL BRANDS

In addition to the same branding decisions every producer has to make, international marketers must decide whether to adopt a worldwide brand or use different brands for different countries. In this section, we discuss some of the ways in which the international environment affects this decision.

Advantages of a Worldwide Brand Some companies, such as Apple, have opted to use the same brand and logo for most of their products around the world. This helps develop a global image, especially for customers who travel internationally. In addition, there is evidence that the use of global brands helps identify companies as global players. Within the United States, consumers (especially ethnic minorities) view products of global players more favorably.[65] Other companies, such as Nestlé, associate many of their products under the same family of brands, such as Nestea and Nescafé, to share the positive perception of the Nestlé name.

Using the same brand name globally is hampered by

- Language differences
- Acquisitions

Some Problems with Uniform Brands Nevertheless, a number of problems are inherent in trying to use uniform brands internationally.

Language One problem is that brand names may carry a different association in another language. GM renamed its Buick LaCrosse to Allure in Canada after it discovered through a pre-entry focus group that the word was slang in Quebec for masturbation.[66] Coca-Cola tries to use global branding wherever possible but discovered that the word *diet* in Diet Coke had a connotation of illness in Germany and Italy. The brand is now called Coca-Cola Light outside the United States.

Pronunciation presents other problems, since a foreign language may lack some of the sounds of a brand name, or give it a different meaning. Marcel Bich dropped the *h* from his name when branding Bic pens because of the fear of mispronunciation in English. Microsoft changed the Chinese name of its search engine Bing to Biying so that it sounded like the word for "seek and ye shall find" instead of "illness." IKEA, which uses Scandinavian names for its products, hired a group of Thai speakers to modify its catalogue so that names would not be misinterpreted when pronounced in Thai.[67] Different alphabets present still other problems. For example, consumers judge brand names by whether they sound appealing; those in Chinese need to have visual appeal as well because the Chinese alphabet consists of pictograms. MNEs have taken great pains to ensure not only that the translation of their names is pronounced roughly the same in Mandarin or Cantonese Chinese as elsewhere but also that the brand name is meaningful in pictograms. Coca-Cola is pronounced *Ke-kou-ke-le* in Mandarin Chinese and means "tasty" and "fun." Tide became Tai-zi in Mandarin, which means "gets rid of dirt."[68] Companies seek names considered lucky in China, such as one with eight strokes in it and displayed in red rather than blue. Similarly, the digit 8 is overrepresented in product prices.[69]

Brand Acquisition Much international expansion takes place by acquiring foreign companies with branded products, such as Sara Lee acquiring various Brazilian coffee roasters. Although this has made Sara Lee the coffee-market leader in Brazil, it has been challenging to stretch the promotional budget over many brands.[70] Overall, the proportion of local to international brands is decreasing; however, there are many examples of strong local brands that companies cannot easily displace.[71] Similarly, having a combination of global and local brands that appeal to different segments can sometimes be advantageous, such as those used by the beer company Anheuser-Busch InBev.[72]

Images of products are affected by where they are made.

Country-of-Origin Image Marketers have long noted products' country-of- origin influences on consumers' opinions of their quality. But this influence is complex, depending on such factors as the type of product, consumers' national cultural attributes (such as individualism versus collectivism), and their individual personality differences (such as whether they are materialistic), along with the economic development and nearness of the country-of-origin.[73] In addition, consumers have diverse emotional affinity toward certain countries.[74] Despite the complexity, companies may play up positive and play down negative country-of-origin images. For example, because many Japanese believe that clothing made abroad is superior to that made in Japan, Burberry has created separate labels for its products made there and those made in the United Kingdom (Burberry London brand). In addition, both the country of origin and the brand have positive and negative images that interact. Evidence suggests that a positive brand image can help overcome negative perceptions of the country where the product is made.[75]

- The brand image may help overcome the country image.
- Country of origin images can change.

Still, images can change. Consider that for many years various Korean firms sold abroad under private labels or under contract with well-known companies. Some, such as Samsung, now emphasize their own trade names and Korean product quality. At the same time, the Korean LG Group, best known for its Gold Star brand, has introduced a line of high-end appliances with a European-sounding name, LG Tromm.[76] Nevertheless, there is evidence that consumers have limited knowledge of the country of origin of most brands and that they often misclassify the origins.[77] Such confusion is compounded with the increased mixed origin of the components that make up products.

One ongoing international legal debate concerns product names associated with location. The EU protects the names of many European products based on location names, such as Roquefort and Gorgonzola cheeses, Parma ham, and Chianti wine. It has also pushed for protection against the foreign use of regulated names associated with wines, such as *clos, chateau, tawny, noble, ruby,* and *vintage.*[78]

If a brand name is used for a class of product, the company may lose the trademark.

Generic and Near-Generic Names Companies want their product names to become household words, but not so much that competitors can use trademarks to describe their similar products. In the United States, the brand names Xerox and Kleenex are nearly synonymous with copiers and facial tissue, but they have nevertheless remained proprietary brands. Some other names that were once proprietary—cellophane, linoleum, Cornish hens—have become **generic** and available for anyone to use.

In this context, companies sometimes face differences among countries that may either stimulate or frustrate their sales. For example, *aspirin* and *Swiss Army knives* are proprietary names in Europe but generic in the United States—a situation that impairs European export sales of those products to the United States, since U.S. companies can produce them.

DISTRIBUTION STRATEGIES

A company may accurately assess market potential, design goods or services for that market, price them appropriately, and promote them to probable consumers. However, it will have little likelihood of reaching its sales potential if it doesn't make the goods or services conveniently available to customers. Goods need to be placed where people want to buy them. **Distribution** is the course—physical path or legal title—that goods take between production and consumption. In international marketing, managers must decide on distribution methods among countries as well as within the countries where final sales occur.

We've already discussed operating forms for foreign-market penetration. Chapter 14 discussed distribution channels: moving goods among countries and transferring titles. Rather than reviewing these aspects of distribution, this section discusses distributional differences and conditions within foreign countries that an international marketer should understand.

DECIDING WHETHER TO STANDARDIZE

Distribution reflects different country environments:

- It may vary substantially among countries.
- It is difficult to change.

Within the marketing mix, MNEs find distribution one of the most difficult functions to standardize internationally, for several reasons. Each country has its own distribution system, which an MNE finds difficult to modify because it is entwined with the country's cultural, economic, and legal environments. In fact, wholesalers and retailers have lagged manufacturers and service companies' entries into foreign markets because of the difficulty of breaking into these systems. Nevertheless, many retailers have more recently moved successfully internationally.

Some factors that influence the distribution of goods in a given country include citizens' attitudes toward owning their own store, the cost of paying retail workers, legislation restricting store sizes and operating hours, different effects of laws on chain stores and individually owned stores, the trust owners have in employees, the efficacy of delivery systems, the quality of the infrastructure system, and the financial ability to carry large inventories. A few examples should illustrate how widespread differences are. Compare Hong Kong with the United States: Hong Kong food stores carry a higher proportion of fresh goods, are smaller, sell less per customer, and are closer to each other, which means that companies selling canned, boxed, or frozen foods there encounter less demand per

Does Geography Matter?

Is Necessity the Mother of Invention?

You've probably heard the saying, "that's as difficult as selling a refrigerator to Eskimos." Climate is a great influence on the demand for many products—clothes, sporting equipment, snow tires, air conditioners, and sunscreen, to name a few—and is a variable when identifying market segments. Seasonal changes that occur at opposite times in the northern and southern hemispheres allow you to spread your sales more evenly throughout the year, such as by focusing ski sales in Switzerland from December through March and in Chile from June through September. This hemispheric difference may also lead to your making adjustments. Films aimed at young audiences sometimes debut months apart between the northern and southern hemispheres so as to be viewed during school vacation periods that usually correspond to the hot months.

Natural conditions, such as mountains, waterways, and deserts, create both barriers and expediencies to distribution. For example, countries can more easily build infrastructure where there are flat areas without obstructions; thus, other things being equal, these areas provide better internal distribution possibilities.

Immigration is largely clustered because people move where others of their ethnic group have gone before, thus forming subcultures. Understanding where these groups exist can help identify potential markets aimed at ethnic niches.[79]

Because transportation cost roughly correlates with distance, it is usually higher when the distance between production and market is greater. This extra cost must either be passed on to consumers or be absorbed by the selling company. Moreover, if markets are close to each other, it is more difficult to maintain different price schedules between them because promotion likely reaches both markets. In turn, consumers will buy from the less expensive location. In fact, the closeness of most Canadians to the U.S. border has influenced Canadian stores to stay open longer and operate on more days, lest Canadians cross the border to buy in the United States.

Although geography does play a role in product demand, higher disposable income and technology help overcome many geographic constraints. Some people in hot climates do buy winter clothes and skis because they travel to snowy areas for recreation. People in Dubai even enjoy an indoor ski resort complex. And there's even a market for refrigerators among the Eskimos. ■

store, have to make smaller deliveries, and have a harder time fighting for shelf space. Elsewhere, Finland has few stores per capita because general-line retailers predominate there, whereas Italian distribution has a fragmented retail and wholesale structure. In the Netherlands, buyers' cooperatives deal directly with manufacturers. Japan has cash-and-carry wholesalers for retailers that do not need financing or delivery services. Mail-order sales are very important in Germany, but not in many developing countries with less reliable delivery systems.

How do such differences affect marketing activities? Here's an example. A company targeted most of its European sales through grocery stores but varied the method for getting its products to those stores. In the United Kingdom, a national distributor gained sufficient coverage and shelf space so that the company could concentrate on other aspects of its marketing mix. In France, a single distributor had good coverage in the larger supermarkets but not in smaller retailers, so the company had to explore ways to get secondary distribution without upsetting its relationship with the primary distributor. In Norway, regional distributors predominated, so the company found it difficult to effect national promotion campaigns. In Belgium, the company could find no acceptable distributor, so it had to assume that function itself.

At the same time, a company's system of distribution may give it strategic advantages not easily copied by competitors, such as Avon's strategy of selling directly through independent reps and Amazon.com's Internet sales. Even these companies have had to adjust to national nuances. For instance, Avon does a thriving mail-order business in Japan because of the popularity of that distribution, has beauty counters in China because of regulations on house-to-house sales, has franchise centers in the Philippines because of infrastructure inefficiencies, and has beauty centers in Argentina because many customers want services when they purchase cosmetics.

SELF-HANDLING OR NOT?

Should companies handle their own distribution? Or should they contract other companies to do it for them? In Chapter 15 we discussed factors that favor internalization versus collaboration, and these all apply as well to distribution decisions. Thus, we will not elaborate on these except to comment on some cost considerations.

Distribution may be handled internally

- When volume is high,
- When companies have sufficient resources,
- When there is a need to deal directly with the customer because of the product's nature,
- When the customer is global,
- When the distribution form is a competitive advantage.

Sales Volume and Cost When sales volume is low, a company usually finds reliance on external distributors to be more economical. As sales grow, it may handle distribution itself to gain more control. However, such self-handling may still be difficult for small firms that lack necessary resources.

Nevertheless, companies may limit early distribution costs if they are able to sell regionally before moving nationally. Many products and markets lend themselves to this sort of gradual development. For example, many foreign companies enter the Chinese market by first going to Beijing, Shanghai, and Guanghou, then to provincial capitals, then to other large cities, and finally to smaller cities. Often, geographic barriers and poor internal transportation systems divide countries into very distinct markets. In fact, very little wealth or few potential sales may lie outside the large metropolitan areas.

A company may enter a market gradually by limiting geographic coverage.

Factors Favoring Self-Handling Circumstances conducive to the internal handling of distribution include not only high sales volume but also the following factors:

- When a product has the characteristic of high price, high technology, or the need for complex after-sales servicing (such as aircraft), the company will probably have to deal directly with the buyer. It may simultaneously use a distributor within the foreign country to identify sales leads.
- When the company deals with global customers, especially business-to-business (such as an auto-parts manufacturer selling original equipment to the same automakers in multiple countries), sales may go directly to the global customer.

- When the company's main competitive advantage is its distribution methods, it may control distribution abroad, such as Avon's direct selling through independent representatives. In addition, food franchisors typically maintain some restaurants of their own to serve as "flagships."

DISTRIBUTION PARTNERSHIP

If a company wishes to collaborate with a distributor abroad, it can usually compare a number of potential foreign organizations. While trying to find the best distributors, it must also convince them to handle its products.

Which Distributors Are Best Qualified? By using these common criteria (also useful for domestic options), a company can improve its choice of distributors:

- *The distributor's financial strength:* This helps determine the potential long-term relationship and whether money will be available for such things as maintaining sufficient inventory.
- *Its good connections:* These are particularly important if sales must be directed to certain types of buyers, such as governmental procurement agencies, and in societies where connections and mutual loyalty are often more important than product and price for making sales.[80]
- *Extent of its other business commitments:* These can signify whether the distributor has time for the company's product and whether it currently handles competitive or complementary products.
- *Current status of its personnel, facilities, and equipment:* These suggest its ability to deal with the product, to start up quickly, and to stay in business.
- *Its reliability as an honest performer:* This helps establish whether the use of trust can help enforce performance.[81]

Distributors choose which companies and products to handle. Companies

- May need to give incentives,
- May use successful products as bait for new ones,
- Must convince distributors that product and company are viable.

Promoting to Potential Distributors Companies must evaluate potential distributors, but distributors must choose which companies and products to represent and emphasize. Wholesalers and retailers alike have limited storage facilities, display space, money for inventories, and transportation and personnel to move and sell merchandise, so they try to carry only those products with the greatest profit potential.

In many cases, distributors are tied into exclusive arrangements with manufacturers that impede new competitive entries. This is true in Japan, where many manufacturers have arrangements with thousands of distributors to sell only their products.

Any company that is new to a country and wants to introduce products that competitors are already selling may meet difficulty in finding distributors to handle its brands. Even established companies can find distribution difficult for new products, although they have the dual advantage of being known and being able to offer existing profitable lines only if distributors accept the new unproven goods. Managers wanting to use existing distribution channels may need to analyze competitive conditions carefully to offer effective handling incentives (higher profit margins, after-sales servicing, promotional support, and so on), or identify distributors' problems so as to gain their loyalty by offering assistance. In the end, however, incentives will be of little use unless the distributors believe the company is reliable and its products viable.

DISTRIBUTION CHALLENGES AND OPPORTUNITIES

Although international distribution involves many challenges and opportunities, the following discussion highlights three: the need for after-sales service, the often overlooked cost advantages and disadvantages, and the use of Internet sales.

Replacement parts and service are important for sales.

How Reliable Is After-Sales Service? Consumers are reluctant to buy products that may require replacement parts and service in the future unless they feel sure that these will be readily available in good quality and at reasonable prices. This reluctance is especially keen for imported products because of concerns that distance and customs clearance will delay needed replacement parts. For fairly mature products, there are usually multiple service companies to which consumers can turn in case of problems. However, for products encompassing new technology, especially complex and expensive products, it is more important for producers to develop after-sales servicing. Thus, companies may need to invest in service centers for groups of distributors that serve as intermediaries between producers and consumers. Earnings from sales of parts and after-sales service may sometimes exceed that of the original product.

The question of after-sales service is important for technologically oriented entrepreneurial companies from developing countries, which have been growing, especially those from the BRICs. They face multiple problems in selling abroad because many are young, small, fairly unknown, likely suffering negative country-of-origin effects, and often assumed to be laggards in technological development.[82]

Hidden Distribution Costs and Gains A company considering launching products in foreign markets must approximate final consumer prices to estimate sales potential. Five factors that often contribute to distribution cost differences among countries are *infrastructure conditions, the number of levels in the distribution system, retail inefficiencies, size and operating-hour restrictions,* and *inventory stock-outs.*

Many countries' roads and warehousing facilities are in such bad condition that getting goods to consumers quickly, cheaply, and with minimum damage or loss en route is problematic. For example, Nigeria has no rail links to its ports, has fallen behind in road construction, and has poor connections between big and small cities.[83]

Some countries also have multi-tiered wholesalers that sell to each other before the product reaches the retail level. National wholesalers sell to regional ones, which sell to local ones, and so on. Japan, though changing rapidly, has had many more levels of distribution than, say, France and the United States. As each intermediary adds a markup, prices escalate.

In some countries, particularly developing ones, low labor costs and owners' basic distrust of nonfamily members cause many retailers to engage in practices that are less productive in serving customers, such as using counter- rather than self-service, and forcing customers to a cashier before picking up merchandise. On the one hand, the additional personnel add to retailing costs, and the added time people must be in the store means fewer people being served in the given space. On the other hand, because the retailers tend to be small and dispersed near clients, they reduce the time, cost, and effort for customers to shop.[84] In contrast, most retailers in some (mainly economically developed) countries have equipment that improves the efficiency of handling customers and reports, such as electronic scanners and payment systems linked to inventory-control records and to credit-card companies.

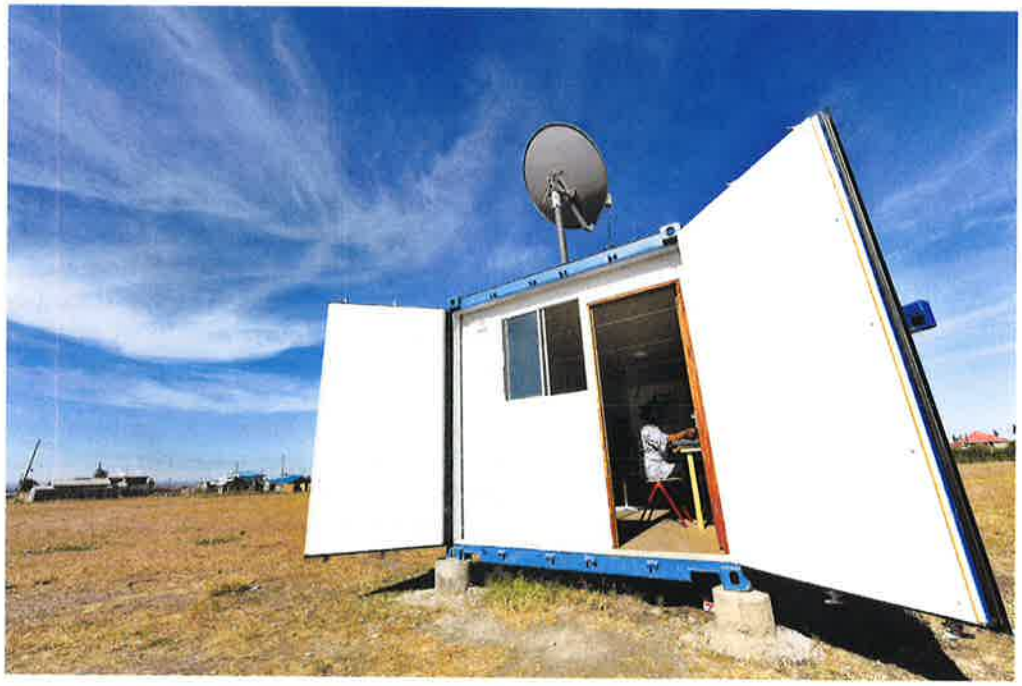
France, Germany, Japan, and many other nations have laws protecting small retailers, effectively limiting the number of large retail establishments and the efficiencies they bring to sales. Most countries have patchwork systems that limit days or hours of operations for religious purposes or to protect employees from having to work late at night or on weekends. At the same time, the limits keep retailers from covering the fixed cost of their space over more hours, so the cost is usually passed on to consumers.

Where most retail establishments are small, there is little space to store inventory. Wholesalers must incur the cost of making small deliveries to many more establishments, sometimes visiting each retailer more frequently because of stock outages. However, these latter costs may be overcome through labor and transport cost savings resulting from low-paid delivery personnel who may carry small quantities of merchandise on bicycles. Further, the retailers themselves incur lower costs because their inventory-carrying costs are low compared to sales.[85]

E-COMMERCE AND THE INTERNET

The growth in online availability creates new distributional opportunities and challenges in selling globally over the Internet.

Estimates vary widely on the current and future number of worldwide online households and the electronic commerce generated through online sales. Nevertheless, they all indicate substantial growth. Further, the adjacent photo shows that people may generally access the Internet through publicly available facilities even though they have no online connections in



This solar-powered Internet café within a shipping container in a rural area of Kenya enables people in an impoverished village to have access to the rest of the world.
Source: Tony Karumba/Stringer/Getty Images

their households and even if they reside in remote areas. Through e-commerce, customers worldwide can quickly compare prices from different distributors, which drives prices down. Through the growing use of social media, they can obtain better information to compare the quality and reliability of products and distributors. There is evidence that online shoppers universally have some similar characteristics: they want convenience, use email and the Internet heavily, and have favorable attitudes toward direct marketing and advertising.[86]

Opportunities E-commerce offers firms an opportunity to promote products globally. It does not, however, relieve them of the need to develop the marketing tools discussed throughout the chapter. For some products and services, such as airline tickets and hotel space, the Internet has largely replaced traditional sales methods. But even here, companies may need to adapt to country differences, such as providing access through various languages.[87] There are certainly many e-commerce success stories. One is the New Zealand prefab housing company Tristyle International, for which about 95 percent of sales are export and 40 percent are through the Internet.[88]

The Internet also permits suppliers to deal more quickly with their customers. Lee Hung Fat Garment Factory of Hong Kong and Bangladesh produces for apparel companies abroad and flashes pictures of merchandise samples to them over the Web. Customers can tinker with the samples and transmit new versions so that Lee Hung Fat produces exactly what the apparel companies want.

Problems Global Internet sales are not without glitches. A company that wants to reach global markets may need to supplement its Internet sales with other means of promotion and distribution, which can be very expensive. Figure 17.3 shows humorously the need to capture Internet sales by convincing people to visit Web sites. Further, a switch to Internet sales may upset existing distribution and, if unsuccessful, make future sales more difficult.[89]

On the Internet, an MNE cannot easily differentiate its marketing program for each country in which it operates. The same Web ads and prices reach customers everywhere, even though different appeals and prices for different countries might yield more sales and profits. If the MNE makes international sales over the Internet, it must expeditiously deliver what it sells, which may require warehouses and service facilities abroad.

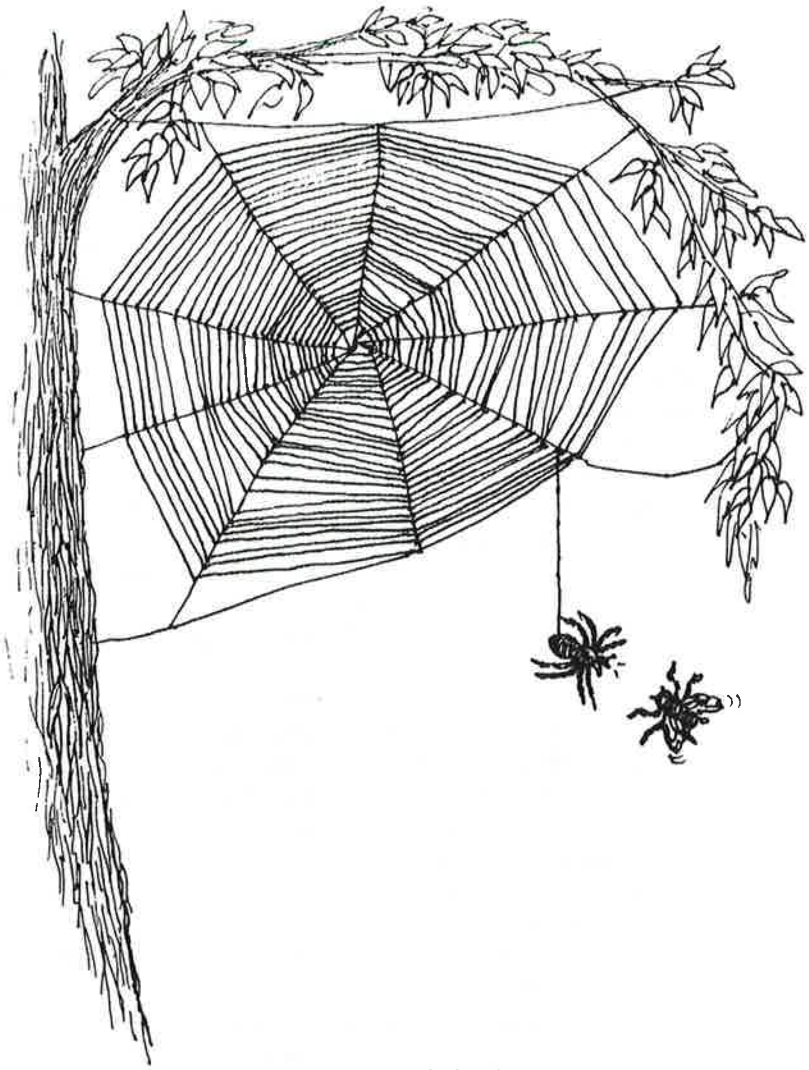


FIGURE 17.3 To capture sales from the Internet, it is first necessary to entice people to connect to the Web site.
Source: Joseph Farris/CartoonStock

Finally, the MNE's Internet ads and prices must comply with the laws of each country of sales. This is problematic because of the Web's global reach. Clearly, although the Internet creates opportunities for companies to sell internationally, it also creates challenges for them.

MANAGING THE MARKETING MIX

Although every element in the marketing mix—product, price, promotion, brand, and distribution—is important, the relative importance of one versus another may vary from place to place and over time. Thus, management must monitor and adjust its marketing programs accordingly.

GAP ANALYSIS

Once a company estimates a country's market potential, it must calculate how well it is doing there and how it might do better. A useful tool in this respect is **gap analysis,** a method for estimating a company's potential sales by identifying prospective customers it could serve more adequately.[90] When sales are lower than the estimated market potential for a given type of product, the company has the possibility to increase them.

The difference between total market potential and a company's sales is due to several types of gaps:

- *Usage*—collectively, all competitors sell less than the market potential;
- *Product line*—the company lacks some product variations;
- *Distribution*—the company misses geographic or type of outlet coverage;
- *Competitive*—competitors' sales are not explained by product line and distribution gaps.

Figure 17.4 is a bar showing these four types of gaps. To construct such a bar, a company first needs to estimate the potential demand for all competitors in the country for a relevant period—say, for the next year or the next five years. This figure gives the height of the bar. Second, a company needs to estimate current sales by all competitors, which is point A. The space between point A and the top of the bar is a *usage gap*, meaning that this is the growth potential for all competitors in the market for the relevant period. Third, a company needs to plot its own current sales of the product, point B.

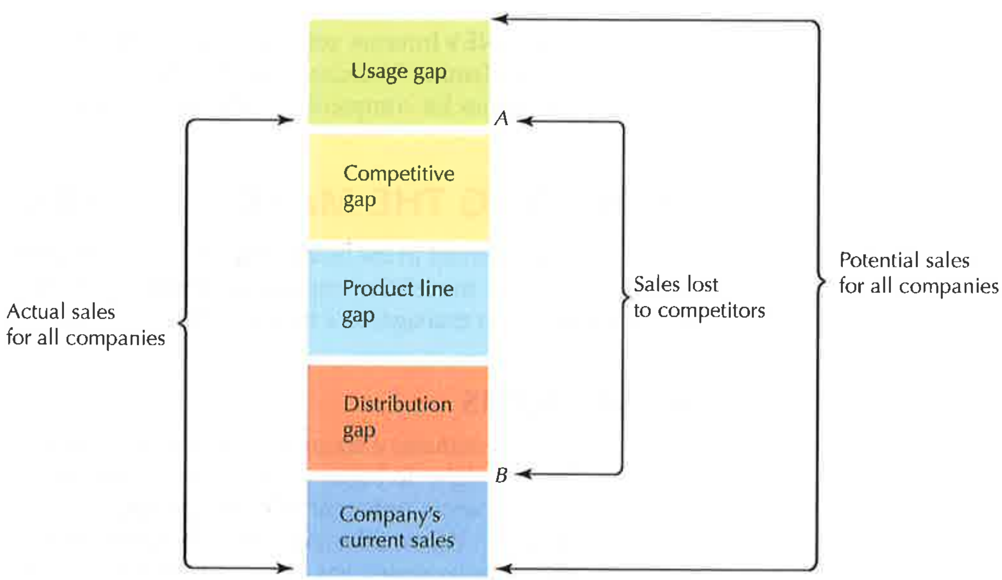
Finally, the company divides the difference between points A and B into types of gaps based on its estimate of sales lost to competitors. The *distribution gap* represents losses to competitors who distribute where the company does not, such as to additional geographic areas or types of outlets. The *product line gap* represents losses to competitors who have product variations the company lacks. The *competitive gap* is the remaining unexplained sales lost to competitors who may have a better image or lower prices.

Usage Gaps Companies may have different-sized gaps in different markets. Large chocolate companies, for instance, have altered their marketing programs among countries because of this. In some markets, they have found substantial usage gaps—less chocolate being consumed than expected on the basis of population and income levels. This has been the case in India, which in 2011 had a per capita consumption of less than one percent of that in Germany. By promoting chocolate as a more hygienic and longer-lasting confectionary product, India's chocolate consumption grew by 75 percent from 2008, making it the world's fastest-growing market.[91] Industry specialists estimate that in many countries, much of the population has never tasted chocolate, leading companies to promote sales in those areas for chocolate in general.

The U.S. market shows another type of usage gap. Nearly everyone in this market has tried most chocolate products, but per capita consumption has fallen because of growing concern about weight. To boost chocolate consumption in general, for a short time Nestlé promoted

FIGURE 17.4 Gap Analysis

Why aren't sales as high as they could be? That's the question asked by a company's managers when they undertake gap analysis. The arrow at the top represents total sales potential for all competitors during a given period. The arrow at A indicates actual sales. Notice that there's a gap between the product's potential and actual sales—the so-called usage gap. But there are other gaps as well. The arrow bracketing points A and B, for example, designates all sales lost by the company to its competitors—the gap, that is, between what the company did sell and what it could have sold if, for a variety of reasons, it hadn't lost so many sales to competitors. Finally, remember that in the real world, gap sizes will fluctuate.



chocolate as an energy source for the sports-minded. Note, however, that building general consumption is most useful to the market leader. With U.S. chocolate sales below those of Mars and Hershey, Nestlé actually benefited its competitors during the short-lived campaign.

Product Line Gaps Chocolate companies have also found that they have product-line gaps. Some lack sugar-free chocolate products, which boosts competitors' sales. Kraft (brands include Cadbury, Dairy Milk and Oreo Cookies) has pursued global sales of fair-traded chocolate, a product once favored only by a small global niche and served by a fragmented group of small producers.[92] It has also added flavors, such as green tea, to its Oreo Cookies for sale in China.[93] Godiva has introduced specialty products in China to compete with local companies selling themed products for the Chinese Zodiac year and for the Mid-Autumn Festival.[94]

Distribution and Competitive Gaps Companies' products may be sold in too few places, creating a gap in distribution. To combat this, Ferrero Rocher has recently emphasized product placement in more mainstream outlets. There also may be competitive gaps—sales by competitors that cannot be explained by differences between product lines and distribution. That is, competitors are selling more because of their prices, advertising campaigns, goodwill, or any of a host of other factors. In markets where per capita chocolate consumption is high, companies exert most of their efforts in gaining sales at the expense of competitors. For instance, Switzerland has one of the world's highest per capita consumption rates of chocolate. In that market, such competitors as Migros, Lindt, and Nestlé's Cailler go head to head in creating images of better quality.[95]

Aggregating Countries' Programs Although gap analysis is primarily a means of prioritizing elements in the marketing mix within given countries, it is also possible to use the tool by aggregating needs among countries. Let's say the product-line gap is too small in a single country to justify the expense of developing a specific new product, such as a heat-resistant chocolate bar. Nevertheless, the combined market potential among several countries for this product may justify the product- and promotional-development costs. Thus, gap analysis may help managers improve country-level performance along with enhancing synergies among the countries where they operate.

Looking to the Future

Evolving Challenges to Segment Markets

Recall the discussion earlier in the chapter on three approaches to segmentation. While all three involve the geographic unit of the nation as one of the key components, such segmentation also involves both demographics and psychographics. How both of these will unfold in future years will likely affect international marketing. There are, of course, many more global trends that may affect future international marketing than we can possibly highlight—e.g. an aging population, growing obesity, increase in the use of social media—thus the following discussion highlights only one key demographic and psychographic area.

Income Demographics

Most projections are that disparities between the "haves" and "have-nots" will grow in the foreseeable future, both within and among countries. Furthermore, because haves will be more educated and more connected to the Internet, they will be better able to search globally for lower prices. Therefore, around the world, the affluent segment will have even more purchasing power than their incomes indicate.

As discretionary income increases, some luxury products will become more commonplace (partly because it will take less work time to purchase them), and seemingly dissimilar products and services (such as cars, travel, jewelry, and furniture) will compete with each other for the same discretionary spending. Japan was the premier importer of luxury goods during the 1980s and early 1990s, but competition from an array of other luxury products and services, such as spas and expensive restaurants, eroded those imports.[96] In addition, many Japanese consumers have moved down-market during the global economic crisis, and there is speculation that they may not move up-market again when the economy improves. Nevertheless, because of better communications and rising educational levels of the haves, they will want more choices. However, market segments may not fall primarily along national lines. Rather, companies will identify consumer niches that cut across country lines.

At the other extreme, because of growing numbers of poor people with little disposable income, companies will have opportunities to develop low-cost standardized products to fit the needs of the have-nots. In reality, low-income households collectively have considerable purchasing power, as we discussed in Chapter 4, and will likely spend mainly on housing, food, healthcare, education, communications, finance charges, and consumer goods.[97] Thus, companies will have conflicting opportunities: develop luxury to serve the haves and cut costs to serve the have-nots. The president of the Wine Academy of Spain pointed out this market split for Chinese wine sales. He indicated that there is no middle market; rather there is a high-end where people spend thousands of dollars per bottle as an investment or to drink at restaurants and a low-end where people spend no more than the equivalent of a few dollars per bottle while buying in large containers.[98] Similarly, some producers are already responding to this market dichotomy. Frito-Lay calls it the "bifurcation" of the snack market and is emphasizing new products for the high and low ends, but not the middle.[99] Despite the growing proportions of haves and have-nots, demographers project that the actual numbers of people moving out of poverty levels and into middle-income levels will increase. This is largely because of population and income growth in some low-income countries, especially in Asia. Such a shift will likely mean that companies' sales growth in poorer countries will mainly be for products that are mature in industrial countries, such as many consumer electronics and household appliances.

Will National Markets Become Passé?

In addition to demographic differences, especially regarding income, attitudinal differences affect demand in general as well as for particular types of products and services. Although global communications are reaching far-flung populations, different people react differently to them. At least three, not mutually exclusive, types of personality traits interact and affect how potential consumers react.[100] They exist in all countries (thus creating a segment that cuts across the globe), but the portion of people who are strongly influenced by one versus the other presently varies by country. How these factors evolve will likely have a profound influence on the future of international marketing.

The first of the traits is **materialism**, which refers to the importance of acquiring possessions as a means of self-satisfaction and happiness, as well as for the appearance of success. There is evidence of a growing and spreading global materialistic culture. However, there is also some evidence that people who have always been affluent may exhibit lower materialistic behaviors than those who have recently become affluent. The second of these traits is **cosmopolitanism**, which refers to openness to the world. While there is debate on whether this is a learned or an inborn trait, some of the characteristics include comparing oneself with the world rather than with the local situation. Cosmopolitanists may actually seek out foreign products and services. The third of these traits is **consumer ethnocentrism**, which refers to preference for local to global, such as seeking out local alternatives when buying products and services.

CASE Grameen Danone Foods in Bangladesh

Professors Jon Jungbien Moon and John D. Daniels

In 1932, U.S. President Franklin D. Roosevelt referred to an impoverished person as "the forgotten man at the bottom [base] of the economic pyramid." Later, the term—shortened to "BoP"—became business jargon after publication in 2010 of *The Fortune at the Bottom of the Pyramid*.

Few places have more impoverished people than Bangladesh.[101] With 161 million people in 2012, its per capita GDP at PPP was only $2,002, with 31.5 percent of the population below the poverty line and the bottom 10 percent living on less than $1 per day. Thus, Bangladesh has many conditions that correlate closely with poverty: an adult illiteracy rate of 43 percent, a high incidence of infectious diseases, a poor infrastructure, high underemployment, crowded conditions (imagine half the U.S. population squeezed into the state of Iowa), and more than its share of natural disasters, especially periodic flooding, that impede development. In the face of these ominous conditions, two companies—the Grameen Foundation from Bangladesh and Groupe Danone from France—have formed a joint venture social business to serve Bangladesh's BoP.

What Is a Social Business?

Mohammad Yunus, founder of the Grameen Bank in 1974 and winner of the Nobel Peace Prize in 2006, originated the concept of a social business, which aims to generate social benefit by creating a sustainable business. The Grameen Danone Foods JV was established as a social business to make a profit but pay no dividends. All earnings are reinvested, except that investors may recoup their original capital input. Unlike NGOs, charities, and not-for-profit organizations, a social business must sustain itself by earning profits competitively rather than receiving continual new contributions to carry on.

The Grameen Bank and Foundation

The Grameen Bank (GB) began when Yunus lent $27 to a group of indigent villagers who repaid the money even though he had required no collateral from them. This small beginning, which was contrary to Bangladeshi bank practices, led to GB's microfinancing program. It has competed primarily with usurious money lenders who charge as much as 10 percent interest per day. GB's typical rate of 20 percent per year may sound high, but Bangladesh has had an inflation rate of nearly 9 percent, and GB supports many non-interest loans as well. Some banks outside Bangladesh, such as Citigroup and Deutsche Bank, have since used GB's example as a model.

Women salute the Grameen Bank when repaying micro loans in Bangladesh.

Source: © RGB Ventures LLC dba SuperStock/Alamy

Before GB, hardly any Bangladeshi loans went to women, and Yunus had to convince religious opposition that the Prophet Mohammad would have supported what he was doing. Today, about 97 percent of GB's loans go to women, and audits show a repayment rate of 98 percent. (Borrowers must repay a loan in order to get a new one.) The adjacent photo shows women saluting GB as they make loan payments. GB uses repayments and interest to make additional loans and to support the Grameen Foundation's poverty-fighting projects. Its loans, which in 2011 came to almost $1.5 billion, have included initial financing for street vendors and construction of more than 600,000 houses. It provides more than 20,000 student loans and 50,000 scholarships per year. It has given non-interest loans to more than 70,000 beggars so they can sell trinkets during their house-to-house begging. The Foundation's activities have expanded into a variety of businesses, such as telephone service, solar power generation, and healthcare.

Groupe Danone

France's largest food company, Groupe Danone (spelled "Dannon" for the U.S. market) operates in four product divisions: dairy (world's largest, with Danone being almost a generic word for yogurt); bottled water (ranked second globally, including such brands as Evian and Volvic); baby food (second globally under the Blédine brand); and medical nutrition (largest in Europe). It operates worldwide and had 2012 sales of almost €21 billion ($27 billion). Before its JV with Grameen, it had no operations in Bangladesh. In fact, it aimed most of its products, such as its Activia and Actimel brands of yogurt, at higher-end consumers.

Why Invest in a Social Business?

Why would Danone, or anyone, want to invest in an operation that yields them no dividends or capital gains? Yunus contends that people are multidimensional and thus may desire more than economic gains for themselves, such as a craving to help the less fortunate. He points to business leaders (e.g., Carnegie, Gates, Rockefeller) who turned their attention to philanthropy after amassing large fortunes. Danone's JV participation fits this multidimensional vision. In fact, it has a history of socially responsible behavior, with a corporate mission "to bring health through food to as many people as possible." Further, it is the world's largest food company devoted to producing and selling only healthy foods. Nevertheless, Danone must generate profits, and its management must answer to shareholders. The Bangladeshi JV could offer several potential economic advantages.

Maturing of Traditional Markets

The demand for Danone's lines of business has been maturing in wealthier countries, which have been Danone's traditional markets. Hence, its management has been shifting more emphasis to poorer countries. Between 1999 and 2010, the share of its sales coming from LDCs increased from 6 percent to 49 percent. Yet even there its sales have centered on affluent segments, about which its chairman, Frank Riboud, said, "It would be crazy to think only about the peak of the pyramid." Thus, Bangladesh could serve as a laboratory for learning about customers and ways of operating at the BoP.

Promoting LDC Growth

Critics complain that MNEs' sale of superfluous products in developing countries contributes to economic underdevelopment because poor consumers lack the means to purchase nutritious food to make them more physically productive. Danone's products are all healthful and sanitary. Although one company's successful marketing of such products is not likely to have any significant impact on development, it is nevertheless a potential catalyst, which perhaps also leads to favorable publicity. Further, as BoP consumers move upward economically, they will have more to spend on other Danone products and may favor them because of their earlier experience. Riboud said, "When poverty is on the rise, my own growth prospects shrink. [This] means that combating poverty is good for my business."

Building Sales and Loyalty Abroad

Being perceived as socially responsible, such as helping needy causes, may improve business performance in various ways. However, there are an almost infinite number of competing needy causes toward which to contribute. The amount Danone invested in the JV was $500,000, a small outlay for a company of that size, and Danone stood to get the money back if the operation became sufficiently profitable. Moreover, the fact that it would become one of the first major corporations to invest in a social business could generate free positive publicity. In retrospect, Riboud has indicated that Danone's employees in France feel they are part of this project, so the small initiative has revitalized the company's culture.

Preceding the Bangladeshi JV

At a 2005 lunch in Paris, Riboud asked Yunus what Danone might do to help the poor. When Yunus explained the social business concept, Riboud immediately said, "Let's do it," and the two shook hands on setting up their JV. Although this JV is one of the first social businesses established in partnership with a major MNE, Roosevelt's "forgotten man" was not completely forgotten in the interim. Many organizations have marketed to the BoP (most notably in the 1970s' heyday of the appropriate technology movement), with such devices as crank-operated cash registers, dung-powered stoves, and bicycle-propelled water pumps. Nor is this JV the first effort aimed at nourishing the poor. A notable example is Central America's protein powder (Incaparina), which, though more nutritious and less expensive than milk, has had mixed success.

These experiences offer the following lessons for companies wishing to tap the BoP, especially with a nutritious product:

- ***Price***—Low and stable prices help create and sustain sales, so companies gain an advantage by finding new means to cut and stabilize their own costs, which they then pass on to customers.
- ***Product compatibility***—High nutrition at a low price alone is insufficient. Products must be compatible with the target market's accustomed habits and visually appealing and flavorful to buyers, so it is vital to pick the right products and adapt them to local markets.
- ***Education***—Within some countries the BoP is largely illiterate, has low access to popular media, and is unconvinced about cause-effect scientific relationships. Hence, it may be important to reach people in this segment by nontraditional means, convince them that changes from nutrition are important and take time, and convey information that they will believe.
- ***Promotion***—Publicity prior to the start of sales is quite valuable, so the use of opinion leaders (those that this group accepts) is essential in developing credibility.
- ***Competition***—Given efforts to help the poor, competition may come from government programs, not-for-profit organizations, and charities. Thus, companies need to outperform this competition or find means of working cooperatively with it.

Strategic Thrust and Orientation

After their 2005 Paris handshake, Grameen and Danone began production in less than two years, during which time they planned and carried out preliminary work. The partners started with a small rural factory to serve only its surrounding poverty-stricken area. Given their JV's social objective, the partners agreed that product and production would be as green as possible. Even though the factory is the size of only one percent of Danone's standard factories elsewhere, it has the latest equipment, treatment of both incoming and outgoing water, and solar panels to generate renewable energy.

Product Policies

The introductory plant makes only yogurt, a product of high nutritional value for children. It relies on efficient small-scale production and nearby supplies of the main ingredient (milk).

Through market testing, Danone decided to sell a sweeter and thinner yogurt, drinkable directly from the container (subsequent market feedback led the JV to sell spoons as well). It fortifies the yogurt with 30 percent of the daily need for vitamin A, zinc, and iodine, and it uses biodegradable technology so that containers can be converted to fertilizer.

Pricing

To keep costs and prices low, the plant uses only local ingredients, mainly from small suppliers such as farmers with only one or two cows, who collect and deliver milk in jugs (thus saving refrigeration and transportation costs). Fixed sales costs are kept low by selling only on commission (about 20 percent to saleswomen and 80 percent to small local stores). Personnel costs have been kept limited since completion of its start-up phase by using only Bangladeshis. Although the yogurt plant lacks scale economies, its unit costs are equivalent to Danone's larger plants elsewhere.

Two factors created temporary cost problems. First, milk prices rose by about 40 percent between initial planning and the plant's opening. Management subsequently negotiated longer-term contracts with farmers to better stabilize prices; hence, the JV pays higher than market price sometimes and less at other times. Second, management and saleswomen expected higher sales than what materialized. Rather than raising commissions to maintain the sales force, the company successfully suggested selling additional products during house-to-house visits.

Promotion

Most promotion is word of mouth; however, one promotional event was noteworthy. Riboud arranged for the best-known Frenchman in Bangladesh, the soccer star Zinédine Zidane (Zizou), to visit the plant's opening, an event that made large headlines in newspapers throughout the country. While in Bangladesh, Zizou played with youth in the national stadium, signed the cornerstone of the plant, and contributed to instant national recognition for the new JV and its yogurt.

Branding

The JV name put Grameen first because of its established high recognition. The yogurt brand is Shokti Doi, meaning "yogurt for power." The brand's symbol is a muscled lion that appears on the product and in ads. Lion-dressed mascots also visit youth areas to describe the value of eating yogurt.

Distribution

Bangladesh's high underemployment attracted more than enough women to work part-time selling yogurt. These were mainly poor mothers from the JV's target sales market. However, the JV had to contend with a backlash similar to the one GB faced when lending to women; the complaint this time was about the impropriety of women going house-to-house. The next big task was to train the saleswomen on (1) the significance of selling yogurt other than to earn a commission and (2) the essentiality of the yogurt's quality and how to maintain it.

Nourishment was the prime reason for selling. The company engaged doctors to explain that children's consumption of only two cups of yogurt per week enables them to regain within 9 to 10 months any physical loss from previously deprived nutrition. The second significance was to improve the economy, such as helping suppliers who would then hire more people and spend within the community.

Maintaining yogurt quality was essential because few homes had refrigeration and eating a spoiled product could cause illness and future sales losses. The company demonstrated to saleswomen how it makes yogurt, provided them with insulated bags, showed them how to use the bags properly, and stressed the need for them to carry only a minimum inventory to lessen the chance of spoilage.

Evaluation

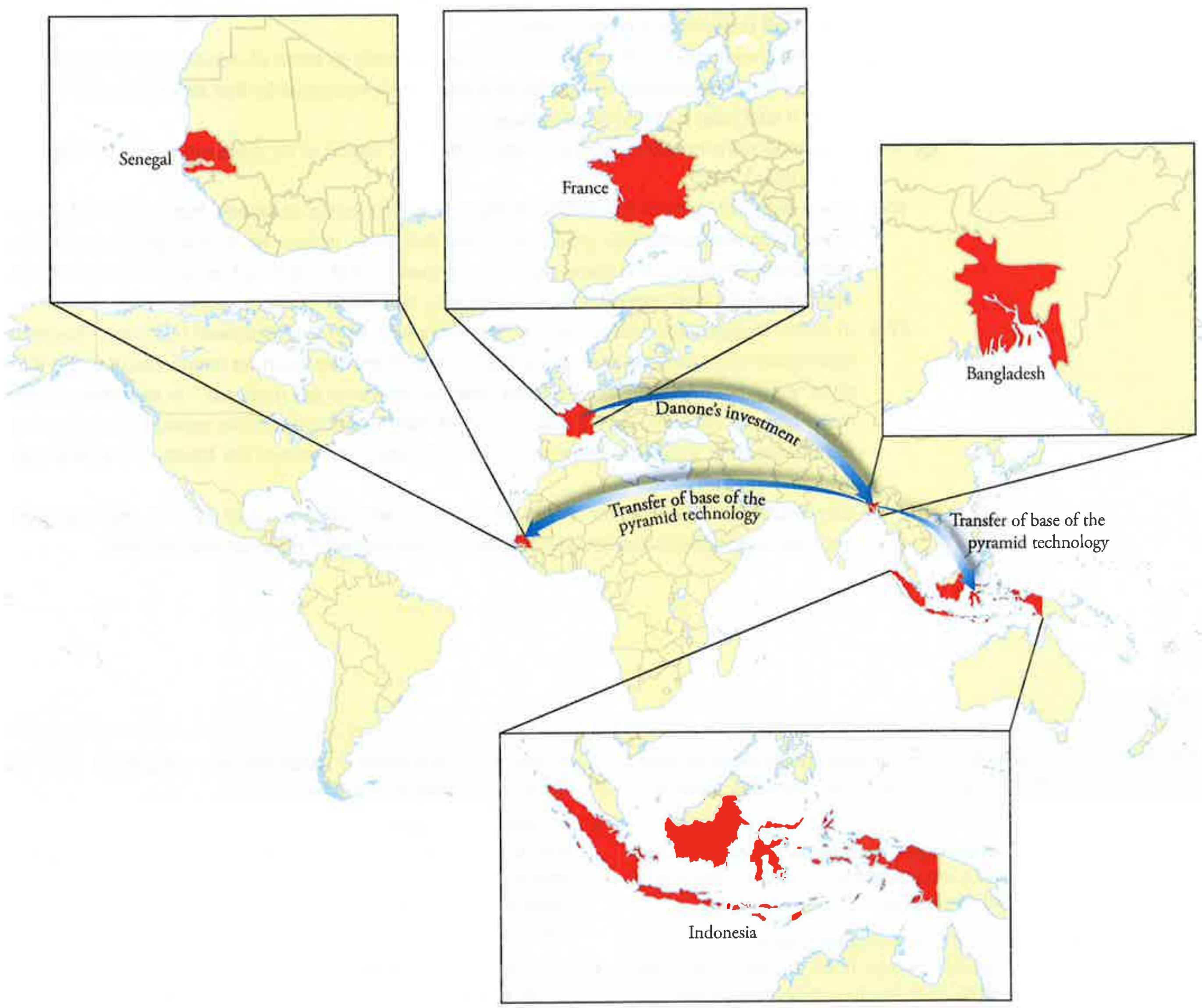
Evaluating the JV's financial performance is straightforward; however, assessing its social effects is challenging. For this, the JV has hired a Swiss-based nutrition organization (GAIN) to develop, test, and validate its performance in terms of meeting the objectives for poor people. Preliminary findings have compared children who have consumed yogurt with and without micronutrient fortification and conclude that the former have grown more in height. In addition, psychometric tests show that the former are significantly better at important mental functions such as planning, concentration, problem solving, and conceptual flexibility.

The Future

Grameen Danone Foods' sales have increased steadily, from 150,000 cups in 2008 to 22.5 million cups in 2011. The number of saleswomen employed at the end of 2011 was 821. Further, Danone has learned much in Bangladesh about running small-scale production

MAP 17.1 Grameen Danone Foods Joint Venture

Groupe Dannon from France joined the Grameen Foundation to form a social business joint venture in Bangladesh. Subsequently, Group Dannone learned about serving the base of the pyramid and has transformed this knowledge to help it operate in Indonesia and Senegal.



efficiently and is transferring this knowledge to help with its operations in Indonesia and Senegal. (Map 17.1 illustrates the international connections.) Inspired by this new model of collaboration, other major MNEs are establishing social businesses with Grameen Foundation. Grameen Intel Social Business Ltd. was founded in 2011 to create software applications on handheld computing devices that address such social problems as low agricultural output and lack of prenatal care. BASF, a German chemical company, formed BASF Grameen Ltd. and inaugurated production in 2012 of long-lasting insecticide-impregnated nets to fight the spread of malaria. Despite all the publicity and promise of these high-profile collaborative ventures, however, Danone will need to evaluate how brand recognition and good-will at the BoP can be harnessed for sales farther up the pyramid in order to expand to more affluent market segments.

QUESTIONS

✪ **17-3.** What advantages might Danone receive from the Grameen Danone joint venture?

17-4. How much do you think Danone's decision to set up a social business was motivated by wanting to be socially responsible versus believing the move would help its performance? Does the answer to this make any difference?

17-5. What marketing pitfalls might Danone face if it tries to duplicate its Bangladesh experience to serve BoP customers in other countries?

17-6. Assume a company, such as Danone, wishes eventually to serve all income segments within a country. What advantages and disadvantages might it encounter by first serving the BoP? How might it later deal with any disadvantages?

✪ **17-7.** If Danone were to add products to sell to the BoP, which of its products would be the best candidates? Why?

17-8. Since establishment of the Grameen Danone Foods social business, the number of social businesses worldwide has grown so much that there is now an annual global summit in Wolfsburg, Germany. Are there types of companies that might not be good candidates to establish social businesses? If so, what are they and why?

17-9. In 2010, Bangladeshi Prime Minister Sheikh Hasina said that Grameen had been "sucking money out of the people after giving them loans. There has been no improvement in the life-style of the poor so far. They were just used as pawns to get more aid." In response, Yunus resigned from the bank, saying that he did not want to distract from its activities. Evaluate the Prime Minister's statement. How might Yunus's resignation affect the future of the Grameen Danone Foods JV?

17-10. Can you think of any other MNEs that can collaborate successfully with the Grameen Foundation and help solve specific problems in Bangladesh? How can they do this?

SUMMARY

- Although the principles for selling abroad are the same as those for selling domestically, the international manager must deal with a less familiar environment.
- International marketing strategies depend on a company's orientation, which may center around production, sales, customers, and/or strategic or social marketing.
- Companies need to decide which market segments to target, including different or similar groups from different countries; then, they must ensure that their product, branding, promotion, pricing, and distribution decisions are compatible with the needs of their target markets.
- A standardized approach to marketing means maximum uniformity in products and programs among the countries in which sales occur. Although this minimizes expenses, most companies make marketing adaptations to fit country needs to increase sales volume.
- A variety of legal, cultural, and economic conditions may call for altering products to capture foreign demand, but the cost of

alteration relative to additional sales potential should be considered. In addition to determining when to alter products, companies also must decide how many and which products to sell abroad.

- Government regulations may directly or indirectly affect the prices that companies charge. International pricing is further complicated because of currency value fluctuations, differences in product preferences, price escalation in exporting, and variations in fixed versus variable pricing practices.
- For each product in each country, a company must determine not only its promotional budget but also the mix between push and pull strategies and promotions. The relationship between push and pull should depend on the distribution system, the cost and availability of media, consumer attitudes, and the product's price compared to incomes.
- Major problems for standardizing advertising among countries include translation, legality, and message needs.
- Global branding is hampered by language differences, expansion by acquisition, nationality images, and laws concerning generic names. Nevertheless, global brands help develop a global image.
- Distribution channels vary substantially among countries. The differences may affect not only the relative costs of operating but also the ease of making initial sales.
- Companies need to choose distributors carefully on the basis of both their abilities and their trustworthiness. At the same time, companies have to sell themselves to get distributors to handle their products and services.
- Although the Internet offers opportunities to sell internationally, using it does not negate companies' needs to develop sound programs within their marketing mix.
- Gap analysis is a tool that helps companies determine why they have not met their market potentials for given countries and to decide what part of the marketing mix to emphasize.
- Two future changes may greatly affect how companies segment markets in terms of demographics and psychographics: the economic schism between the haves and have-nots; and the composition of people in terms of their tendencies to be materialistic, cosmopolitan, or ethnocentric.

KEY TERMS

cosmopolitanism (p. 684)
cost-plus strategy (p. 667)
distribution (p. 675)
consumer ethnocentrism (p. 684)
gap analysis (p. 681)
generic (p. 675)
gray market (p. 669)
materialism (p. 684)
penetration strategy (p. 667)
product diversion (p. 669)
pull (p. 671)
push (p. 671)
skimming strategy (p. 667)

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CHAPTER 18

Global Manufacturing and Supply-Chain Management

OBJECTIVES

After studying this chapter, you should be able to

1. Describe the different dimensions of a global manufacturing strategy
2. Examine the critical factors in successful global supply-chain management
3. Show how supplier networks function
4. Explain how quality affects global supply and effective inventory management
5. Discuss how to establish successful transportation networks as part of the global supply chain

A cheap thing doesn't lack defect, nor an expensive thing quality.

—Afghan proverb

Source: © jeremy sutton-hibbert/Alamy

CASE Apple's Global Supply Chain

How long does it take to get an iPhone?[1] In September 2012, Apple, the largest consumer electronics company in the world and the largest company in the U.S. in market capitalization, formally announced the iPhone 5, the sixth generation of the iPhone and successor to the popular iPhone 4S. The hype over the new phone was so high that pre-orders swamped Apple's ability to get enough phones from its factory in ZhengZhou, a city in the north-central region of China. Mandy Xiao was living in Provo, Utah at the time and wanted to get the phone by Christmas of 2012, so she ordered the phone directly from Apple.com on December 5. The factory in ZhengZhou is actually owned by Taiwan-based Hon Hai Precision Industry Co. Ltd., also known as the Foxconn Technology Group. Given the Christmas rush and the fact that ZhengZhou was a little over 6,500 miles away, Mandy wasn't sure how long it would take to get her phone. But Apple's supply chain was fast. Mandy was able to track her phone's journey by UPS online from ZhengZhou to Inchan International Airport in Korea to Anchorage, Alaska to her door in Provo, Utah—only two days after it was ordered. If you are going to compete today, you need to get the product to the consumer as soon as possible, and Apple excels at this, even when it's 6,500 miles away from the consumer.

APPLE'S ORIGINS

Apple's initial supply chain was relatively simple. In 1976, Steve Jobs and Steve Wozniak ("Woz") sold their first product, the Apple I computer, out of the Jobs' family garage in Cupertino, California. Woz was the designer and Jobs ran the business in the up-and-coming microcomputer industry. Jobs and Woz had to design the product, develop the operating system that made it work, manufacture it, and market it. Large auto companies like Ford and GM had the same issues, but they invested significant resources into building massive manufacturing facilities to supply the market. Unlike the auto companies, the new Apple Computer company was not a major manufacturer of products, but primarily an assembler of components supplied by other companies. However, Apple was extremely successful with this new venture, although the cost of the computer was quite high (since the company was in its infancy), volumes were not very high, and competition was not very strong.

What really changed the game was the entry of IBM into the market. IBM knew that to beat Apple, it needed to drive down costs as low as possible. Initially, IBM was a large vertically integrated company that produced most of its parts and components itself within the U.S. In the early 1980s, however, IBM realized that it needed to use external suppliers for key components in an effort to create a cheaper alternative to the Apple II computer, the successor to Jobs' and Woz's successful Apple I computer. Then IBM outsourced its operating system to Microsoft and its microprocessor to Intel, and the race was on. By taking a close look at the value chain, IBM was able to modularize the industry so that Microsoft, for example, could sell its operating system to any company that wanted to use it, and Intel could develop semiconductors for a wide range of products for many different companies. This allowed them to achieve even greater economies of scale.

APPLE'S ADAPTATION

Apple adapted in many different ways, as did the entire consumer electronics industry. Apple's strength was in the design of new products that consumers wanted. However, it realized that it had to go far beyond just computers. Rather than just stick with personal computers, it branched off into a variety of mobile communication and media devices, portable music players, software, and cloud storage. Its products include the iPhone, iPad, Mac, iPod, and the Apple TV, and it designs and manufactures its own products. Apple always comes up with cool stuff, and it is being pushed by new entrants in the market like Samsung. But it is still known for new ideas and new products, the strength of Steve Jobs and the organization he created before he died.

The big challenge is how do you manufacture this wide range of products? Apple has assembly operations in Freemont, California, Cork, Ireland, and Singapore using components supplied by other companies. In 2012, it even announced that it was "reshoring" or bringing the manufacturing of some of its Macs back to the U.S. by investing $100 million in new facilities to assemble the computers. Even though Apple no longer manufactures its own components, it buys them from suppliers, what is also called supply-chaining. Apple's decision to reshore some of its production is partly due to lower energy costs, rising wages in countries like China, a weaker U.S. dollar, quality control issues, and proximity to the large U.S. market. However, this is not a major shift in the way Apple manufactures all of its products.

THE RISE OF CONTRACT MANUFACTURING

Most of the components Apple uses come from multiple sources, but some are from single or limited sources, which can create supply problems. This is especially true when Apple uses some custom components that are not widely used in the industry but are used only for its products. Apple's search for reliable suppliers coincided with the emergence of Hon Hai Precision Industry Company, Ltd., widely known as Foxconn Technology Group. Foxconn was founded in Taiwan in 1976 by Terry Gou, about the same time Apple was founded. Gou began his company with a loan of $7,500 from his mother with a goal of to increasing the affordability of electronics products by combining his expertise for mechanical and electrical parts with a low-cost solution. He started supplying parts to Atari and then traveled to the U.S. to develop relationships with U.S. companies. One of the companies that he won orders from was IBM. Gou arrived at just the right time. IBM's supply chain moved from being vertical to horizontal and from sourcing only domestically to sourcing internationally.

When Apple assembles products at its factory in Singapore, it is offshoring, meaning that it is moving a factory offshore from the U.S. to assemble products. The factory still belongs to Apple, but it may still get parts and components from a variety of suppliers, mostly from Asia. Apple's relationship with Foxconn is different. As wages began to rise in Taiwan, many companies moved to the Philippines and Malaysia, but Foxconn invested in China, initially in Shenzhen but later to other cities where labor was plentiful and cheap. As it picked up more orders from abroad, it rose from a small company in Taiwan to the largest contract electronics manufacturer in the world, employing over 1 million people in China.

Although Foxconn supplies components to a variety of companies from all over the world, it is clear that Apple is its #1 customer. In fact, when concerns arose in the first few months of 2013 over Apple's first quarter results, shares of Hon Hai fell by 14 percent, with simliar results for shares of other Apple suppliers. However, when the first quarter results were released and Apple appeared to be doing just fine, the shares recovered their losses and posted gains. Such is the relationship between Apple and its suppliers.

When Tim Cook, the current CEO of Apple and successor to Steve Jobs, was brought into the company in 1997, he was asked by Jobs to clean up the manufacturing process. Manufacturing problems and excess inventory were a drag on corporate profits, cash flow, and therefore on funds available for investment in new products. As Cook worked to strengthen manufacturing, he developed strong supplier relations with companies throughout Asia, including Foxconn. The difference with Foxconn is that Apple was able to outsource the assembly of entire products, such as the iPhone5 mentioned above, instead of just sourcing components that Apple could assemble at its own facilities. Rather than manufacture the product through offshoring in Ireland or Singapore, Apple was able to outsource the entire production process to Foxconn as a contract manufacturer. Apple designed the product with very tight specifications and worked with Foxconn and their suppliers to roll out new products, but Foxconn was responsible for the manufacture and delivery of the product to Apple. Now nearly all of Apple's hardware products are manufactured by outsourcing partners located primarily in Asia. A significant amount of the manufacturing is currently performed by a small number of outsourcing partners, like Foxconn, in single locations. Some of these partners are sole-sourced suppliers of components and manufacturers of many of Apple's products.

Although Foxconn became a very trusted contract manufacturer, Apple still has to work hard to make sure the quality of the product and components are exactly what it is looking for. It's one thing to control quality at your own assembly facilities, and it's quite another thing to make sure Foxconn's quality is high enough. Apple's strong relationship with Foxconn and other suppliers is the envy of the industry. However, contract manufacturing is not without its problems. News of Foxconn's problems with its employees at its facilities in China created PR problems for Apple. Workers were accusing Foxconn of forcing them to work long hours in poor conditions, and some employees even committed suicide by jumping from Foxconn buildings. As a result, Mr. Cook visited factories in China and insisted that Foxconn and other suppliers comply with Chinese labor laws and even higher international standards of worker safety. Apple became the first technology company to join the Fair Labor Association, and Apple began publishing the results of its audits on worker conditions in 2007. In 2012, Apple listed the names of 156 companies that supplied it with parts and other services used by the Company in manufacturing its products. Any company that outsources to a company in a developing country faces similar challenges. It is important for companies like Apple to set high expectations, monitor compliance, and disclose information to its stakeholders.

THE LAST PART OF THE SUPPLY CHAIN

In addition to designing and manufacturing good products, Apple needs to worry about marketing, the last part of the supply chain. When Mandy decided to buy her iPhone, she had lots of options. Apple sells its products worldwide through its retail stores, online stores (Mandy's choice), a direct sales force, and third-party cellular network carriers, wholesalers, retailers, and value-added retailers. The photo at the beginning of the chapter is an Apple retail store opened in Shanghai in 2011, only the second Apple store opened in China. As of 2013, there were 8 Apple stores in China, three of which are in Shanghai. It sells its digital content through a variety of sources, including the iTunes Store. The key is to get the products from the point of manufacture to the final consumer, over 50 percent of whom are located outside of the United States. Clearly Apple's geographic spread was helping it to continue to grow and remain at the top in consumer electronics. ■

CRN Case Review Note

QUESTIONS

18-1. Although Apple's inbound logistics began with Apple controlling the assembly of its computers, it shifted to having suppliers acquire raw materials with contract manufacturers handling most of the production and assembly of final products. Why did they do this, and what are the major challenges Apple faces?

18-2. Foxconn, a major contract manufacturer for Apple, is by far the largest ODM/EMS (original design manufacturer/Electronics Manufacturing Services) company in the world, dwarfing U.S.-based Flextronics, which is the major manufacturer and assembler of Samsung phones. In 2013, Foxconn was contemplating opening operations in the United States. In what way could this be a challenge for Apple, Inc.?

INTRODUCTION

Most companies agree that effective supply-chain management is one of their most important tools in reducing costs and boosting revenue.[2] Our opening case on Apple illustrates dimensions of these supply-chain networks that link suppliers with manufacturers and customers. Throughout this chapter we will explore the different networks and examine the links in an effective global supply chain. As illustrated in Figure 18.1, the core of an effective global supply chain strategy is operations. In the chapter, we will discuss the international dimensions of the global supply chain—from input to operations to final distribution to the consumer—through the following perspectives: the upstream processes of the purchasing function and supplier networks; operations strategy; the role of information technology in global supply-chain management; operations management including quality, total quality management and just-in-time inventory management; and downstream processes including effective transportation networks.

CRN Case Review Note

We must note here that effectively managing a supply chain is as important for services as it is for manufacturing. While our opening case on Apple traces developments in the supply-chain strategy of a traditional manufacturer, the closing case on Nokero involves the manufacturing of a low-cost product, zeroing in on how to provide a service—light—on a global basis in a cost-effective and environmentally friendly way.

WHAT IS SUPPLY-CHAIN MANAGEMENT?

Supply chain—the coordination of materials, information, and funds from the initial raw-material supplier to the ultimate customer.

The **supply chain** is the network that links together the different aspects of the value chain (defined in Chapter 12) and coordinates materials, information, and funds from the initial raw-material supplier to the ultimate customer.[3] As determined by the Council of Supply Chain Management Professionals,

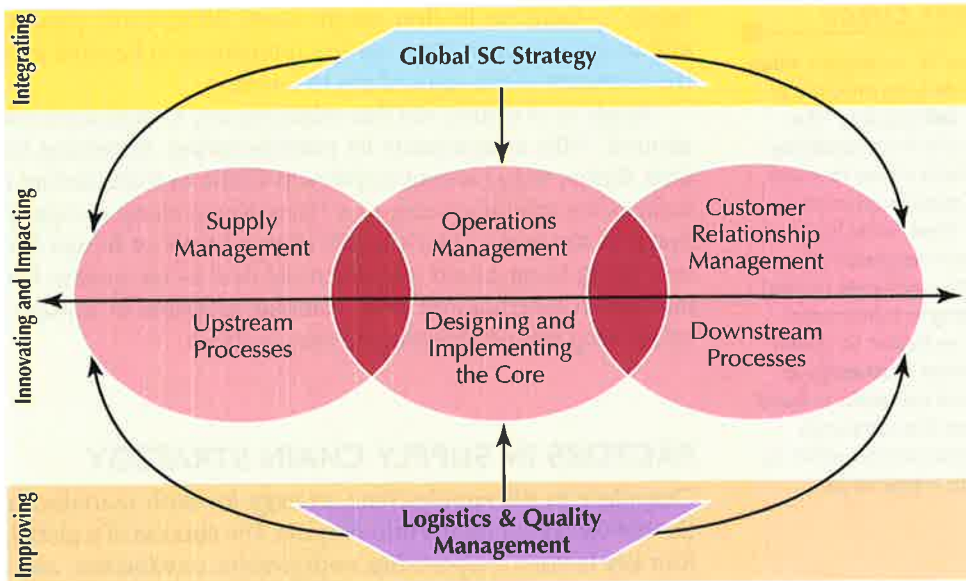


FIGURE 18.1 An integrated supply chain and operations model.
Source: Tom Foster, Jr.

> ...supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies.[4]

Supply-chain management refers to activities in the value chain that occur outside the company, whereas **operations management** (also known as **logistics management**) often refers to internal activities. For example, Toyota assembles parts into a car. The assembly is part of the operations of the company, and the supply chain gets the parts to the factory and the final product to consumers worldwide.

Logistics (also called materials management)—that part of the supply-chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet customers' requirements.

Suppliers can be part of the company's organizational structure, such as in a vertically integrated company, or they can be independent of it. Direct suppliers, in fact, have their own networks. For example, Foxconn, a contract manufacturer for Apple, has its own network of suppliers used in the manufacturing of Apple products in its factories in China. In a global context, they can be located in the country where the manufacturing or assembly takes place, or they can be located elsewhere and ship materials to the final assembly facility or to an intermediate storage point. Manufacturing process output can be shipped directly to the customers or to a warehouse network and sold directly to the end consumer or to a distributor, wholesaler, or retailer, then on to the final consumer. As is the case in the supplier network, the output can be sold domestically or internationally.

Most MNEs have excelled in their ability to manage their supply-chain networks. Examples exist all over the world, such as Apple (U.S.), Tesco (UK), Samsung (Korea), Nokia (Finland), Toyota (Japan), H&M (Sweden), and Zara (Spain). The companies we study in this chapter are considered part of a global network that links together designers, suppliers, subcontractors, manufacturers, and customers. The supply-chain network is quite broad, and its coordination takes place through interactions between firms in the network.[5]

GLOBAL SUPPLY CHAIN STRATEGIES

CRN Case Review Note

Recall from our opening case that Apple set up manufacturing facilities in China because of *location-specific advantages* (notably, cheap labor and associated costs), choosing to enter the country through an agreement with Foxconn, its future contract manufacturer. This allowed

Apple to focus on its *firm-specific assets* (innovation, product development, and marketing) and thus move away from vertical integration to become more effective by giving up more of the elements of the value chain to Foxconn.

Apple is, of course, not the only company to outsource manufacturing to others. Examples abound. Nike subcontracts its manufacturing, remaining basically a design and marketing firm. Rather than owning facilities in China to manufacture Barbie dolls, Mattel instead outsources the manufacturing to a Hong Kong-based company that has investments in China. Some of the toys in McDonald's Happy Meals or Burger King meals are also subcontracted to a Hong Kong-based manufacturer. And as we note in Chapter 19, H&M purchases all of its fashion merchandise from external suppliers in Europe and Asia, rather than vertically integrating and establishing its own facilities.

CONCEPT CHECK

In Chapter 12, we explain **value** as the underlying principle of strategy, defining it as "the measure of a firm's capability to sell what it makes for more than the costs incurred to make it." Here, while further refining our discussion of strategy to enumerate factors contributing to a successful strategy, we hasten to repeat our definition of **strategy** as the effort of managers to build and sustain the company's competitive position within its industry to create value.

FACTORS IN SUPPLY CHAIN STRATEGY

One piece in the supply chain strategy for both manufacturing and services is **operations**: the conversion of inputs into outputs. The success of a global operations strategy depends on four key factors: *compatibility, configuration, coordination,* and *control.*[6]

CRN Case Review Note

Compatibility Compatibility in this context is the degree of consistency between the foreign investment decision and the company's competitive strategy. Apple, for instance, realized that although direct manufacturing made sense initially, its strategy dictated that it was more effective at innovation and distribution. Here are some factors that companies must consider as they align their overall strategy with operations:

- *Efficiency/cost*—reduction of operational costs
- *Dependability*—degree of trust in a company's products, its delivery, and its price promises
- *Quality*—performance reliability, good service, speed of delivery, and dependable product maintenance
- *Innovation*—ability to develop new products and ideas
- *Flexibility*—ability of the production process to make a variety of products and adjust the volume of output[7]

CONCEPT CHECK

In discussing the process of "Creating Value" in Chapter 12, we explain that a firm that aspires to a position of "Cost Leadership" strives to be the low-cost producer in an industry for a given level of quality. This strategy, we observe, means that the firm adopts one of two tactics, both of which must be compatible with the structure of its value chain: (1) earning a profit higher than industry rivals by selling products at average industry prices or (2) capturing market share by selling products at prices below the industry average.

Compatibility—the degree of consistency between FDI decisions and a company's competitive strategy.

Efficiency/Cost Strategies *Cost-minimization strategies* and the drive for global efficiencies force MNEs to establish economies of scale in manufacturing, often by producing in areas with low-cost labor. This is a major reason why many MNEs have established operations in lower-cost emerging markets—a type of FDI known as **offshore manufacturing** or simply "offshoring" (which, again, includes services as well as manufacturing).

Total cost analysis—an in-depth assessment of the complete cost of a transaction that takes into account acquisition, ownership, and disposal costs.

Total Cost Analysis When employing a cost-minimization strategy, companies tend to overlook important elements—and extra costs—of offshoring, such as shipping distances, extra inventory, political and security risks, and the availability of skilled and educated workers. In other words, when deciding to source abroad, companies should consider the total cost of facilitating the strategy, as opposed to merely the acquisition cost.

A *total cost analysis* takes into account ownership expenses, such as storing, transporting, and disposing of inventory. In some instances, wages may be such a small percentage of overall costs that employing cheap labor abroad does not effectively save the company money. For example, Nike decided to employ a small contractor in San Francisco to produce some of its made-to-order goods—despite the $15-per-hour rates that were 20 times those of contractors in China—because the overhead costs, such as managing the flow of goods from halfway around the world and the risk of stock-outs and high inventories, were so much higher in China.[8]

Dependability Strategies Many factors besides cost must also be considered. The growing customer demand for *dependability* and prompt deliveries has led companies such as Dell Computer to locate plants closer to customers rather than only in low-wage areas. When a longer supply chain risks late deliveries of components or finished goods, shortening the distance can improve dependability.

Innovation and Quality Strategies Many companies are also responding to the importance of *innovation* and *quality*. One example of innovation is a new technology known as 3D printing. Instead of ink cartridges, 3D printers are filled with materials such as plastic and titanium. After you create a blueprint on your computer you press print and the printer builds up your object one layer at a time. These printers are able to do the job of a manufacturing machine in about the same time, with less waste, and with more opportunities to customize the product.[9] When first investing abroad to take advantage of low-cost labor, companies are not as concerned about innovation. But as more and more of them establish offshore R&D facilities, they are able to move beyond low-end manufacturing.

Quality is a major issue—one that is discussed later in more detail. As long as foreign operations ensure high quality and contribute to innovation, companies will keep setting up operations abroad. However, offshoring and outsourcing requires significant work with partners to ensure high quality products. This is true in any industry, but it is especially true in electronics, as illustrated in the Apple case.

The key to effective offshoring and outsourcing is having a global network of partners with whom to work. Sometimes the network is essential for global teams; other times it's essential to determine where to source inputs, establish operations, or penetrate new markets. The bottom line is: the effectiveness of a company's global supply chain strategy depends on a good network of contacts.

Source: ARENA Creative/Shutterstock

CONCEPT CHECK

In Chapter 12, in discussing "Configuration" as a factor in creating a **value chain,** we explain the importance of identifying the best location economies—those in which operations can be most effective given prevailing economic, political, and cultural conditions. We also analyze several factors that may influence a company's decisions in configuring its value chain (e.g., cost, logistics, economies of scale, buyers' needs).

CRN Case Review Note

CONCEPT CHECK

Recall from Chapter 12 our extended discussion of "Global Integration versus Local Responsiveness" as an issue in configuring and coordinating a firm's value chain. We then proceed to explain how efforts to resolve this issue may contribute to the formulation of a **global** strategy or a **multidomestic** strategy for international operations. Here we analyze ways in which this same issue can put pressure on specific strategic decisions about the configuration of manufacturing facilities.

CRN Case Review Note

Manufacturing configuration:
- Centralized manufacturing in one country
- Manufacturing facilities in specific regions to service those regions
- Multidomestic facilities in each country

Flexibility Strategies The need for responsiveness or *flexibility* in the face of national market differences may result in regional manufacturing to serve local markets. It may not be possible to create all products in one location and ship them around the world. Wall's of Unilever, for example, makes ice cream in China, so it is able to develop products that are unique to the Chinese market as well as produce such global brands as the Magnum Bar and the Cornetto. However, Wall's has found that it can produce some of its global brands during the winter when demand is down and ship them to South Africa and Australia during their summer, enabling the use of excess production facilities and reducing costs in markets outside China.[10] Still, despite such flexibility, differences in measurement systems, time zones, and problem-solving approaches can also add unnecessary complexity to the supply chain.

Changes in Strategy As a company's competitive strategies change, so do its manufacturing strategies. In fact, it may adopt different strategies for different product lines, depending on their competitive priorities. For example, to reduce the cost and complexity of its products, Finnish mobile-phone maker Nokia designs phones that contain fewer parts and bases its different models on the same basic components, allowing it to maintain 17 percent profit margins on its low-end phones and 19 percent on its higher-end models—substantial numbers in the highly competitive market for cellular phones.[11] When Apple realized it had to control costs to remain competitive, it changed from being a vertically-integrated company to one that relied on contract manufacturers for managing the flow of materials and the manufacture of hardware.

Priding itself on high quality, Toyota has traditionally relied on manufacturing in Toyota City, Japan, where it is close to suppliers and can ensure high quality and adherence to its manufacturing strategy. However, it has developed a family of vehicles based on a single low-cost platform that is targeted to emerging markets. To keep the prices low enough to compete in the developing world, Toyota has abandoned its traditional practice of sourcing key components from its Japanese plants and is locating factories for these parts in low-wage areas such as South America, Africa, and Southeast Asia, which has helped reduce the costs by 20 to 25 percent. Still, managers are concerned that they may lose control over quality, a situation that became ever more real when Toyota faced significant recalls due to safety matters.[12] Many suggested that the drive for global market share caused the automaker to sacrifice quality and safety.

Manufacturing Configuration MNEs must consider three basic configurations in establishing a global manufacturing strategy:

- *Centralized Manufacturing*—Basically a manufacture-and-export strategy that offers a selection of standard, lower-priced products to different markets, centralizing is common for companies new to exporting, and is typically done through their home-country facilities. It is also important for expensive items for which economies of scale in manufacturing are important and for which there is little need for localization for consumption in different markets, such as aircraft. Nokero, which will be described in more detail in the ending case, is a U.S.-based company that manufactures solar light bulbs in one factory in China and exports them around the world. In addition, every one of Apple's iPads and most of its iPhones are manufactured in a single Foxconn factory in China and shipped all over the world.
- *Regional Manufacturing*—These facilities serve customers within a specific region, as Samsonite initially did in Europe with its production facilities in Belgium, and as Toyota is doing in developing countries. Dell assembles computers in Brazil and exports them to different markets in South America—another example of a regional strategy, since it doesn't assemble computers in every country where it sells them.
- *Multidomestic Manufacturing*—Market expansion in individual countries, especially when the demand there becomes significant, might entail this approach in which a firm manufactures products close to its customers, using country-specific manufacturing facilities

It is far more efficient for Boeing to utilize its manufacturing facilities in Everett, Washington (U.S.) to assemble the 777 and 787 Dreamliner (shown in this photo) than it would be to set up final assembly in multiple plants in different countries.
Source: Stephen Brashear/Stringer/Getty Images

to meet local needs.[13] This is the approach that Philips, the Dutch electronics company, used after World War II. Because there were barriers to entry in European countries, and in order to maintain market share in the individual countries, Philips had to manufacture on a country-by-country basis. The reduction of trade barriers lessens the need to have manufacturing facilities in every country, but country size may result in firms establishing manufacturing facilities to supply the local market. Unless an MNE has such facilities in every country it operates in, it must combine exporting with manufacturing. In reality, MNEs choose a combination of these approaches depending on their product strategies.

Offshore manufacturing—any investment that takes place in a country other than the home country.

Offshore Manufacturing Once a company decides to manufacture outside its home market, it is engaging in offshore manufacturing, as was the case when Apple set up manufacturing facilities in Cork, Ireland and Singapore. The 1960s and 1970s saw a sharp escalation in offshore manufacturing as one electronics company after another set up production facilities in the Far East, mostly in Taiwan and Singapore. Those locations were attractive because of low labor costs, the availability of cheap materials and components, and proximity to markets. Even the athletic-shoe market left the United States for Korea and Taiwan. As wages rose in Korea, however, manufacturing began to shift to other low-cost countries, such as Indonesia, Malaysia, Thailand, and Vietnam. Piaggio, for instance, could have manufactured Vespa motorbikes in Italy and exported them to Vietnam, but it made more sense to manufacture them in Vietnam, with its cheaper costs, manageable transportation and tariffs, and a good market for the product.

China in particular has become the hot spot for manufacturing. Often called the world's factory, its output is so large and wide-ranging that it exerts deflationary pressure around the world on products such as textiles, TVs, furniture, auto parts, and mobile phones. As the world's largest manufacturer, China accounted for over 20 percent of world manufacturing in 2011, followed by the United States, Japan, Germany, and Italy. This is a big jump since 1991, when it ranked only #8 in the world.[14] Many MNEs set up operations there in the 1980s to capitalize on its huge population and growing demand.

Luggage manufacturer Samsonite is among the companies that have found it more cost-effective to manufacture products in China—and not just for the Chinese market, but for export to the rest of the world as well. More recently, it shifted a majority of its manufacturing

CRN
Case Review Note

to India. As will be explained in the closing case, Nokero manufactures its solar light bulbs in Shenzhen, China. Still other companies, such as Hewlett-Packard, Microsoft, and Motorola, have looked beyond simply outsourcing manufacturing to China and have established R&D centers within the country. IBM and General Motors are even using the country as a global center for their procurement operations.[15]

Countries also often specialize in the production of parts or final goods—a process known as *rationalization*. When Samsonite opened a new factory in the 1980s in Hénin-Beaumont, France, to manufacture the Prestige Attaché and a few other products, it was able to remove their production from its facility in Oudenaarde, Belgium, where it could then focus on its new Oyster product line. This strategy of specializing the manufacture of certain products in certain plants eventually made it feasible to export all production to a centralized European warehouse, from which Samsonite could then distribute its whole product line to retailers all over Europe. As the scale of production increases, it is common for companies to specialize in the production of certain products rather than make all of its product lines in one facility.

CONCEPT CHECK

We discuss control in Chapter 16 from the perspective of organization structure, coordination and control systems, and organizational culture. In explaining "Coordination and Control Systems," we explain that, regardless of its structure, the MNE must develop coordination and control mechanisms to prevent duplication of efforts, to coordinate resource allocation, and to ensure that company-wide operations benefit from ideas generated anywhere in the organization.

Corporate management often requires additional data to coordinate and control operations. In Chapter 16, we discuss some of the key types of information supplied by IT.

Coordination and Control Coordination and control fit well together. *Coordination* is the linking or integrating of activities into a unified system.[16] The activities include everything along the global supply chain, from purchasing to warehousing to shipment. It is hard to coordinate supplier relations and logistics activities if those issues are not considered when the manufacturing configuration is set up.

Once the company determines the manufacturing configuration it will use, it must adopt a control system to ensure that company strategies are carried out. *Control* can be the measuring of performance so a firm can respond appropriately to changing conditions. Another aspect of a control structure is the organizational structure, discussed in more detail in Chapter 16.

SUPPLIER NETWORKS

Coordination is linking or integrating activities into a unified system.

Control systems, such as organizational structure and performance measurement systems, ensure that managers implement company strategies.

Sourcing—the process of a firm having inputs supplied to it from outside suppliers (both domestic and foreign) for the production process.

Global sourcing and production strategies can be better understood by taking a look at Figure 18.2. **Sourcing** is the process of obtaining a supply of inputs (raw materials and parts) for production. The figure illustrates the basic operating-environment choices (home country or any foreign country) by stage in the production process (sourcing of raw materials and parts, manufacture and assembly of final products). Global sourcing is the first step in the process of materials management, which includes sourcing, inventory management, and transportation between suppliers, manufacturers, and customers. Figure 18.2 is a simplified version of Figure 18.1 in that it focuses on the domestic vs. international options of sourcing, operations, and sales. From a supplier network perspective, auto companies are good examples. Ford assembles some of its models in Hermosillo, Mexico and ships them into the United States for end-use consumers. For many years, some of these models were designed by Mazda, a Japanese company, and used some Japanese parts. U.S.-made parts were shipped to Mexico for final assembly and sale in the United States and Mexico. For Mexican assembly, some of the parts came from the United States, some from Japan, and a small percentage from Mexico. However, the alliance between Ford and Mazda became a casualty of the global financial crisis, and the two companies have basically parted ways.

Case: A Loaf of Whole-Grain White Bread Although global sourcing is often linked with high-tech and complex products, the process affects even the low-cost products we use and consume every day. Take U.S.-based Sara Lee's whole-grain white bread. To make this bread, Sara Lee acquires ingredients from a variety of suppliers, nearly a third of which are located in foreign countries. Its guar gum, used to keep the bread moist, is a powder that comes from the guar-plant seedpods grown in India. Calcium propionate, a powdery mold inhibitor that is manufactured in several countries, is sourced in the Netherlands. Honey, used as a natural sweetener, is purchased from suppliers in the United States, China, Vietnam, Brazil, Uruguay, India, Canada, Mexico, and Argentina. Sara Lee sources from several different countries besides the United States because the U.S. supply can often run short. Flour enrichments to

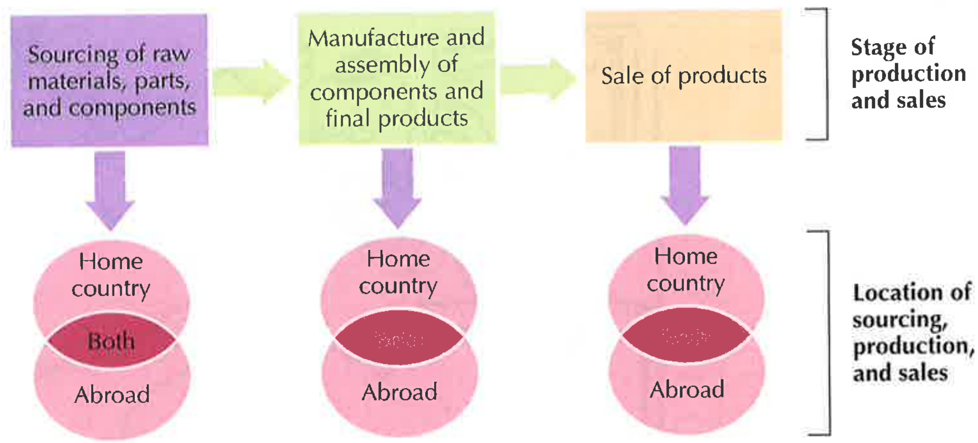


FIGURE 18.2 When a company wants to *source* raw materials, parts, or components as a function of its global strategy, it's faced with some key decisions. It may, for example, decide to source components at home, assemble them abroad, and then export the final product to the home market, to foreign markets, or to both.

replenish the vitamins lost in the milling process come from China. Due to industry consolidation, suppliers of flour enrichments are limited. Beta-carotene, an artificial coloring used to provide color to the bread and crust, is sourced from Switzerland, though it is available in many countries. Vitamin D3 is sourced from China, while wheat gluten comes from several countries, including France, Poland, Russia, the Netherlands, and Australia.[17]

With its ingredient sources spread all over the globe, Sara Lee must manage its supply chain carefully to ensure timeliness, safety, and quality. So it has centralized its global ingredients purchasing by consolidating its previously scattered procurement operations into a single division known as the "nerve center" located at company headquarters. Purchasing specialists monitor weather patterns, commodity trends, and energy prices. They also communicate and work closely with Sara Lee's diverse base of suppliers—in some cases, even investing money in suppliers' operations to ensure that they are complying with U.S. food safety standards.[18]

GLOBAL SOURCING

Companies can manufacture parts internally or purchase them from external manufacturers.

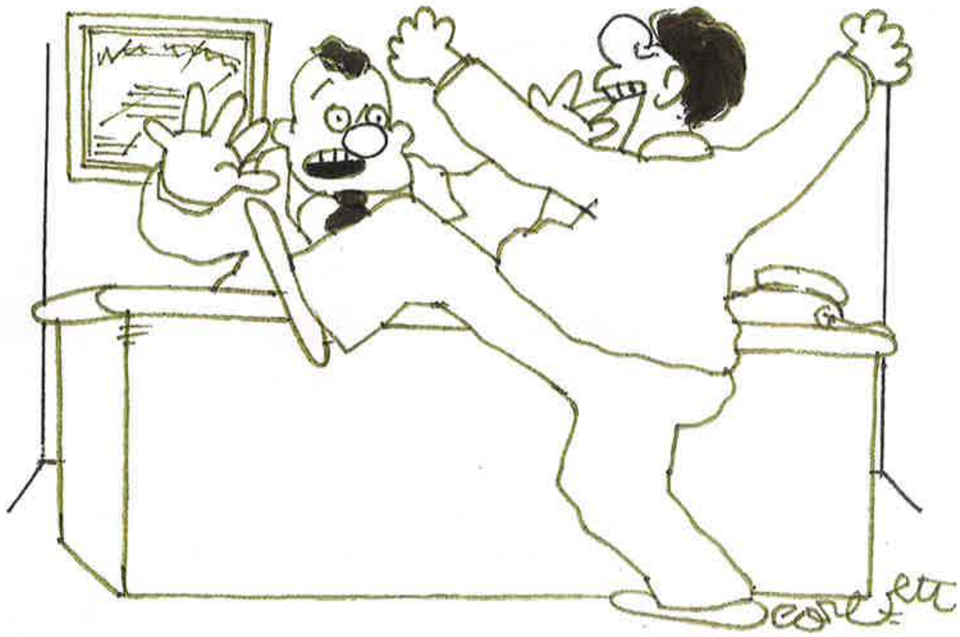
The book *The World is Flat* notes three flatteners relevant to this discussion: #5, Outsourcing; #6, Offshoring; and #7, Supply-Chaining. Flattener #6, which was discussed above, related to manufacturing configuration whereby a firm could decide where to set up its manufacturing operations worldwide. Once the company decided to move offshore from its home country and manufacture abroad, it was engaged in "offshoring." That is what Apple did when it shifted some of its manufacturing to a factory in Cork, Ireland. In Figure 18.2, that is illustrated by the decision to manufacture and assemble components and final products abroad.

On the sourcing side, a company can manufacture parts internally. Of course, a company can purchase parts from external (unrelated) manufacturers as well. It can also assemble its own products internally or subcontract to external firms; the manufacture of parts and final assembly may take place in its home country, the country in which it is trying to sell the product, or a third country.[19]

The term *sourcing* is used in a variety of ways. **Outsourcing**, for instance, refers to a situation in which one company externalizes a process or function to another business. This most often occurs with the IT function but is also being used in other areas, such as research, service centers, and even accounting and tax functions. In addition to *offshore manufacturing*, another type of offshoring occurs when a company moves part of its business processes outside its home country but internalizes the function rather than outsourcing it to another firm. An example would be setting up its own R&D facilities in another country, or, say, a U.S.-based public accounting firm setting up a branch of its tax practice in India. Outsourcing can be domestic or offshore. Sometimes the entire operations can shipped offshore using talent hired in that location, but the people who were working in the operations don't necessarily go offshore. They might be reassigned in the company or let go.

FIGURE 18.3

Source: Jack Corbett/CartoonStock, Ltd.



"No, no, Eddy- it's your job that's moving to Mexico, not you!"

Another way to look at outsourcing is Flattener #7, supply chaining. This is where a company decides to outsource its parts, or components, or products—even its manufacturing—to an external company. One example is Walmart, which buys its products from external suppliers, both domestic and international. Another example is an auto company, such as Toyota, buying its parts from external companies, such as Japanese parts-manufacturer DENSO. Supply chaining is slightly different from traditional outsourcing, which focuses more on a business process, but far more extensive and complicated since it relates more directly to the final product sold to customers. Apple's use of Foxconn as a **contract manufacturer** is technically supply-chaining, although it is similar to outsourcing since the entire manufacturing process is being handled by someone else. In Figure 18.1, a contract manufacture like Foxconn not only assumes the upstream processes, but it also takes on most of the operations management functions since it also does the assembly.

Using domestic sources for raw materials and components allows a company to avoid problems with language differences, distance, currency, politics, and tariffs, as well as other problems.

Sourcing in the home country enables companies to avoid numerous problems such as language differences, long distances, lengthy supply lines, exchange-rate fluctuations, wars and insurrections, strikes, politics, tariffs, and complex transportation channels. However, for many companies, domestic sources may be unavailable or more expensive than foreign sources. In Japan, foreign procurement is critical because nearly all of the country's uranium, bauxite, nickel, crude oil, iron ore, copper, and coking coal are imported, as well as about 30 percent of its agricultural products. Japanese trading companies came into being expressly to acquire the raw materials needed to fuel Japan's manufacturing.

Procter & Gamble has also found that sourcing chemicals from a variety of suppliers abroad is necessary to provide flexibility in a global environment of volatile energy prices. By diversifying its chemical supplier base, P&G plans on being able to switch procurement between different suppliers as energy prices shift in different regions.[20]

Companies outsource abroad to lower costs and improve quality, among other reasons.

Why Global Sourcing? Companies pursue global sourcing strategies for a number of reasons:

- To reduce costs through cheaper labor, laxer work rules, and lower land and facilities costs
- To improve quality
- To increase exposure to worldwide technology
- To improve the delivery-of-supplies process

- To strengthen the reliability of supply by supplementing domestic suppliers with foreign ones
- To gain access to materials that are only available abroad, possibly because of technical specifications or product capabilities
- To establish a presence in a foreign market
- To satisfy offset requirements
- To react to competitors' offshore sourcing practices[21]

These reasons are similar to the benefits to FDI discussed in Chapter 15. Whether the suppliers are company-owned or independent firms, MNEs can take advantage of the location-specific advantages in foreign countries.

In some ways, however, global sourcing is more expensive than domestic sourcing. For example, transportation and communications cost more, and companies may have to pay broker and agent fees. Given the longer length of supply lines, it often takes more time to get components from abroad, and lead times are less certain. This problem increases inventory carrying costs and makes it more difficult to get parts to the production site in time. If imported components come in with errors and need to be reworked, the cost per unit will rise, and some components may have to be shipped back to the supplier.

Concerns in Global Sourcing One concern with global sourcing is quality and safety. In April 2013, more than 1,000 people were killed when a garment factory collapsed in Bangladesh, the second-largest clothing exporter after China. The factory which housed many garments that supply the "fast fashion" industry popularized by Zara and Mango had been given the green light by the government to continue operating even though cracks were showing up in the walls and foundation. Now every retailer that buys fashions built in factories like the one that collapsed are trying to figure out what they can do to pick their suppliers better and disclose what they are doing to help protect workers. As the U.S. government announced that it was suspending preferential trade treatment for Bangladesh due to poor labor practices, several U.S. companies such as Walmart and the Gap were preparing to set up a $50 million fund to improve worker conditions in Bangladesh's garment factories over a five-year period. In Bangladesh, however, the anger was over the government's failure to enforce safety codes, not the actions of the companies buying the garments that were being manufactured.

A major challenge with these issues is finding the source of a given problem. Supply chains have become so long and complex that buyers can't be sure who the original producer is.[22] In Chapter 11, we mentioned the problem IKEA faced when it was accused of exploiting child labor by purchasing carpets in India and Pakistan from suppliers who employed children. IKEA had to make a more concerted effort to find out what suppliers were doing and require them to live up to high hiring standards so as to eliminate child labor abuse.

Companies must also pay attention to natural disasters that can affect countries where they get their goods. The earthquake and tsunami that hit Japan in 2011 had an ill effect on those who relied on goods from factories that were destroyed. The auto industry was hit particularly hard. For example, many automakers—including General Motors, Peugeot-Citroën, and Ford—relied on a supply of airflow sensors from the Hitachi factory in Japan, which incurred a great deal of damage during the disaster. Other parts, such as the LCD chips used to monitor fuel, were also hard to come by. One estimate claimed that "about one-third of vehicle production globally [was] expected to grind to a halt." Automakers soon realized how quickly their supply chain could be disrupted due to forces outside their control.[23]

CONCEPT CHECK

In discussing "Taking Control: Foreign Direct Investment" in Chapter 15, we define internalization as the self-handling of operations (that is, by keeping them internal to the company). We point out the genesis of this concept in transactions cost theory, which holds that when there's a decision to be made between handling something internally and contracting with someone else to handle it, companies should opt for the lower-cost alternative. As we suggest later in this chapter, make-or-buy decisions invite the application of this principle.

MAJOR SOURCING CONFIGURATIONS

Vertical Integration **Vertical integration** occurs when a company owns the entire supplier network, or at least a significant part of it as was the case with Apple before it began to outsource to suppliers and use contract manufacturers. The company may have to purchase raw materials from outside suppliers, but it produces the most expensive parts itself.

n reduce transaction costs (finding suppliers, selling output,
nitoring contracts, settling disputes with unrelated companies) by
levels in the value chain.[24]

Major outsourcing configurations include

- Vertical integration
- Outsourcing through industrial clusters
- Other outsourcing

Integrating vertically ca
negotiating contracts, mo
internalizing the different

Industrial Clusters Ou
reduce transportation and
close to each other to fac
operation in the Multimed

Keiretsus Japanese *keir*
to manage the flow of g
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because parts suppliers te
usually has an ownership
the keiretsu allow the co
often sharing proprietary
when new technology is d
chased a struggling Nissa
to open-source bids. Toyo
and price pressures result
start looking beyond its cl
to benchmark against Ch
pricing, Toyota will be forc

tsourcing through **industrial clusters** is an alternative way to
l transaction costs. Under clustering, buyers and suppliers locate
ilitate doing business. For example, Dell established an assembly
lia Supercorridor in Malaysia, where it is close to its key suppliers.

etsus are groups of independent companies that work together
ods and services along the entire value chain.[25] Toyota's highly
ork is among the most successful and well known of the Japanese
mple of industrial clustering. It borders on vertical integration
nd to set up shop close to Toyota's assembly operations, and Toyota
interest in them. The trusted relationships among companies in
npanies to work closely together from the design phase onward,
technology but also allowing each other the first right of refusal
eveloped. The system began to unravel when France's Renault pur-
n, and the new owner disbanded the Nissan keiretsu and shifted
a followed suit to a limited extent. Changes in its global markets
ng from the high cost of steel and the strong yen forced Toyota to
sely knit supplier base in Japan by pressuring its *keiretsu* suppliers
na's cheaper suppliers. If the suppliers can't achieve low enough
ed to court suppliers outside Japan.[26]

CONCEPT CHECK

As we explain in Chapter 15, the **resource-based view** of the firm holds that every company has a unique combination of competencies. Here we suggest that make-or-buy decisions may depend on the extent to which a firm embraces this view, which may prompt it to concentrate internally on those activities that best fit its competencies while depending on other firms to supply products, services, or support activities for which it has lesser competency.

THE MAKE-OR-BUY DECISION

When it comes to product
Which should be perform
companies? In the case of
should be carried out in th
involves the three flattene

In deciding whether to
critical to the product and
when suppliers have a dist
ture, or stronger performan
underperforming employe
determine the design and
own capabilities. If the sup
would cost to catch up to t

on activities, MNE managers struggle with a *make-or-buy decision*:
ed internally and which could be subcontracted to independent
subcontracting, a company must also decide whether the activities
e home market or abroad. This involves developing a strategy that
s: outsourcing, offshoring, and supply-chaining.

make or buy, MNEs can focus on those parts of production that are
hat they are particularly good at making. They can outsource parts
nct comparative advantage, such as greater scale, lower cost struc-
ce incentives. They can also use outsourcing as an implied threat to
s: Improve, or we move the business elsewhere.[27] The MNE must
manufacturing capabilities of potential suppliers compared to its
plier has a clear advantage, management needs to decide what it
he best suppliers and whether it would make sense to do so.

Make or buy—outsource or supply parts from internal production.

If MNEs outsource parts instead of sourcing them from internal production, they need to determine the degree of involvement with suppliers.

Should Firms Outsource Innovation?

Point

Point **Yes** A firm should outsource innovative processes if it can maintain focus and position itself effectively in the roiling high-tech and electronics industries. More and more companies are coming to realize the advantages of doing so. Suppliers are taking on such responsibilities as designing and manufacturing prototypes, converting them into workable products, upgrading mature products, conducting quality tests, putting together user manuals, and selecting parts vendors. The designs of 65 percent of PC notebooks and those of 70 percent of PDAs are outsourced. Companies such as Dell,

Motorola, and Philips are buying complete designs from Asian developers. Even Boeing collaborated with an Indian company to develop software for its 787 Dreamliner jet.

Companies willing to outsource some R&D and technological designs can experience enormous cost savings. Although innovation is key to remaining competitive, more and more firms find that their internal R&D teams aren't producing results that justify the large investments in them. Thus, in the face of demanding customers and relentless competition that pressures margins, managers must find a way to reduce costs or increase R&D productivity.

Outsourcing is a viable solution. Companies can save millions by simply buying designs rather than developing them in-house. For instance, using a predesigned platform for cell phones can reduce the costs of developing them from scratch—which takes approximately $10 million and 150 engineers—by 70 percent. Furthermore, demands by retailers and customers as well as uncertain future market trends require developing a costly range of product models. Third-party developers are better equipped to handle such costs, spreading them over many buyers and possessing the expertise to develop a variety of models from a single basic design.

Outsourcing also helps get products to market faster, which is crucial where products become commodities in a matter of months. Hewlett-Packard claims that by working with partners and suppliers on designs, it now gets a new concept to the market in 60 percent less time. Critics worry that by outsourcing technology, companies are outsourcing their fonts of competitive advantage; still, outsourcing certain design and development processes allows firms to focus more on their true core competencies. Few, if any, companies plan on completely eliminating their own R&D forces, and most insist they will continue with the more proprietary R&D work.

No one company can manage everything in-house. Even the Chief Technology Officer of Nokia—a company that once prided itself on developing almost everything on its own—has stated, "Nobody can master it all." In fact, a recent survey of MNEs found that almost three-quarters of respondents believed they could boost innovation dramatically by collaborating with outsiders, even competitors.[28] The companies that will survive in the future are those able to efficiently and effectively control a network of partners and suppliers around the world.

Should Firms Outsource Innovation?

Counterpoint

No When it comes to outsourcing R&D, design, and development work, how does a firm know where to draw the line? How does it determine what is core intellectual property and what is commodity technology? The truth is, outsourcing turns the former into the latter, which becomes available to most anyone. Look at Toshiba. By working with South Korean chipmakers to develop its DRAM memory chips, it allowed the technology behind these components to become commoditized and is now struggling to stay ahead.[29]

Competitive advantage often depends on trade secrets that set a firm apart from its rivals. Outsourcing innovation enhances the risk that it will pass on these proprietary technologies to suppliers and partners, thereby fostering new competitors. Because suppliers rarely cooperate solely with one customer, the R&D they do for one can easily be transferred to another. Such was the case for Japanese company Sharp, which worked closely with suppliers to develop a "sixth-generation" plant for making larger flat panels for televisions. Unfortunately, its suppliers also work closely with Sharp's rivals, many of them Taiwanese companies, and not long after the completion of the plant, these competitors were constructing their own "Gen-6" facilities. Sharp now takes extra precautions, such as secretly rewriting software on some equipment and fixing machinery in-house rather than having suppliers do it. However, it may be too late since Foxconn of Taiwan bought 10 percent of Sharp in 2012 and one of its factories in Japan that manufactures LCD displays.[30]

Suppliers and partners might also take the information and technology that have been shared with them and become competitors themselves. After Motorola hired Taiwanese company BenQ Corp. to design and manufacture its mobile phones, BenQ began selling the phones under its own brand

Counterpoint

name in the highly competitive Chinese market, causing Motorola to terminate the contract.

Perhaps more important than giving rise to new competitors is losing competitive edge and investment incentive. Although some assert that outsourcing certain development and design work allows companies to focus more on new innovative technologies, it more often prompts companies to decrease internal R&D investments and become lazy in their pursuit of future breakthroughs, relying too much on suppliers to do their work. Jim Andrew, senior vice president of Boston Consulting Group, warns, "If the innovation starts residing in the suppliers, you could incrementalize yourself to the point where there isn't much left."

High-tech and electronics firms that outsource their innovative processes risk losing the essence of their actual business, becoming mere marketing fronts for others. It also sends a bad message to investors, who might have difficulty finding intrinsic value in a company that owns little true intellectual property and whose profits from successful products are most likely being paid out in licensing fees to the companies that actually developed them.

Much has been made of manufacturing outsourcing in the past few decades, but outsourcing innovation poses a potentially greater threat to high-tech firms that see it as a shortcut to cost savings. Looking to immediate savings is shortsighted, and firms that do so will ultimately damage their competitive positions and lose viability as true industry players.[31]

1. Now that Apple purchases its iPhones and iPads from Foxconn, should it let Foxconn develop the new technology that goes in Apple's products so that they can focus more on marketing? Why or why not?

SUPPLIER RELATIONS

Supplier relationships are very important but sometimes complicated, especially for MNEs trying to manage them around the world. As noted on the website of John Deere, the company's supplier base is broad, reflecting the diversity of its global markets. In order to maintain a good relationship with suppliers, John Deere has a supplier code of conduct that is translated into 18 different languages. It seems like most MNCs with significant supplier bases outside of their home countries, especially in developing countries, have supplier codes of conduct. Apple's supplier responsibility report for 2012 focuses on empowering workers, labor & human rights, health & safety, the environment, and accountability. The foundation of the supplier code of conduct is to ensure that workers have the right to safe and ethical working conditions. The report discusses supplier accountability, including their audit program, and it also discloses its 17 final assembly facilities, including who the supplier is and what they assemble, and its top 200 suppliers which represent 97 percent of its procurement expenditures worldwide.

Of course, not all supplier relationships are as collaborative as those of Apple and Foxconn. Sometimes large customers can use their strong market presence and buying power to place additional demands on suppliers. For many years, GM has pressured its U.S. suppliers to lower costs by certain set percentages each year and then pass those cost savings on to GM via lower prices. As it moved to increase production in China, some suppliers felt pressured to set up facilities in China to accommodate GM.[32]

The relationships MNEs establish with their suppliers are based largely on their individual competitive strategies, the nature of their products, the competitive environment they face, supplier capabilities, and the level of experience and trust they share with them. MNEs must consider these factors as they determine what kind of supplier relationship will best meet their needs.

THE PURCHASING FUNCTION

Global progression in the purchasing function:

- Domestic purchasing only
- Foreign buying based on need
- Foreign buying as part of a procurement strategy
- Integration of global procurement strategy

The purchasing agent is the link between a company's outsourcing decision and its supplier relationships. Just as companies go through stages of globalization, so does the purchasing agent's scope of responsibilities. Typically, purchasing goes through four phases before becoming "global":

1. Domestic purchasing only
2. Foreign buying based on need
3. Foreign buying as part of procurement strategy
4. Integration of global procurement strategy[33]

Phase 4 occurs when the company realizes the benefits that result from the integration and coordination of purchasing on a global basis and is most applicable to the MNE—as opposed to, say, the exporter.

When purchasing becomes this global, MNEs often face the centralize/decentralize dilemma. Should they allow each subsidiary to make every purchasing decision, or should they centralize all or some of them? The primary benefits of decentralization include increased production-facility control over purchases, better responsiveness to facility needs, and more effective use of local suppliers. The primary benefits of centralization are increased leverage with suppliers, better prices, eliminating administrative duplication, allowing purchasers to develop specialized knowledge in purchasing techniques, reducing the number of orders processed, and enabling purchasing to build solid supplier relationships.[34]

Case: Electrolux Swedish appliance manufacturer Electrolux has adopted a global purchasing strategy. Despite the worldwide downturn in 2009, Electrolux had a good second quarter due largely to its cost-reduction efforts. One aspect of the strategy was offshoring production to low-cost countries. Another was the reduction of personnel costs. Still another was lowered purchasing and product costs through efficient global purchasing, which cut the cost of buying raw materials and components.[35]

Sourcing strategies in the global context:

- Assign domestic buyers for foreign purchasing
- Use foreign subsidiaries or business agents
- Establish international purchasing offices
- Assign the responsibility for global sourcing to a specific business unit or units
- Integrate and coordinate worldwide sourcing

Major Sourcing Strategies Companies pursue five major sourcing strategies as they move into phases 3 and 4 in the preceding list. Moving from the simple to the complex (where there is no difference between domestic and foreign sources), they are:

1. Assigning domestic buyer(s) for international purchasing
2. Using foreign subsidiaries or business agents
3. Establishing international purchasing offices
4. Assigning responsibility for global sourcing to a specific business unit or units
5. Integrating and coordinating global sourcing[36]

INFORMATION TECHNOLOGY AND GLOBAL SUPPLY-CHAIN MANAGEMENT

A key to making the global supply chain work is a good information system.

A comprehensive supply-chain strategy is most effective with a strong commitment to information technology (IT), which aids in quick and efficient production, proficient inventory management, effective supplier communication, and customer satisfaction. In *The World is Flat*, Flattener #3 is workflow software.[37] Basically encompassing the standard protocols such as HTTP that allow computers to work with each other and business processes such as SAP, workflow software is critical for the supply-chain management process. We'll discuss some of these protocols and processes below and then examine how other "flatteners" that build on the technology platform are important in global supply chain management.

ELECTRONIC DATA INTERCHANGE (EDI)

EDI (electronic data interchange)—the electronic linkage of suppliers, customers, and third-party intermediaries to expedite documents and financial flows.

The key to making a global information system work is getting the relevant information in a timely manner. Apple, for example, has established a B2B (business to business) gateway that all of its suppliers are required to use, which basically allows suppliers to share electronic data with Apple. Many companies use **electronic data interchange (EDI)** to link suppliers, manufacturers, customers, and intermediaries, especially in the food-manufacturing and car-making industries, in which suppliers replenish in high volumes.

In a global context, EDI has been used to link exporters with customs to facilitate the quick processing of customs forms, thus speeding up cross-border deliveries. Walmart is known for its revolutionary use of EDI to connect its global suppliers to its inventory ordering system.[38]

ENTERPRISE RESOURCE PLANNING/MATERIAL REQUIREMENTS PLANNING

ERP (enterprise resource planning)—software that can link information flows from different parts of a business and from different geographic areas.

The next wave of technology affecting the global supply chain was the implementation of IT packages known as **enterprise resource planning (ERP)**. Companies such as Oracle, Baan, PeopleSoft, and German software giant SAP introduced software to integrate everything in the back office (the part of the business dealing with internal matters, as opposed to the front office, which deals with the customer). ERP is essential for bringing together the information inside the firm and from different geographic areas, but its inability to tie in to the customer and take advantage of e-commerce has been a problem.

Material requirements planning (MRP)—computerized information system that addresses complex inventory situations and calculates the demand for parts from the production schedules of the companies that use the parts.

An extension of ERP is *material requirements planning* (MRP), a computerized information system that addresses complex inventory situations and calculates the demand for parts from the production schedules of the companies that use them. DENSO, the Japanese auto parts supplier for Toyota, uses MRP extensively to calculate the demand for parts from the production schedules of the non-Toyota companies it supplies.

RADIO FREQUENCY ID (RFID)

A newer wave has recently swept the technology scene in the form of *radio frequency ID (RFID)*, a system that labels a product with an electronic tag that stores and transmits information on the product's origin, destination, and quantity. When electronic readers scan the tags by means of radio waves, the data can be rewritten or captured and sent to a computer-network database, which collects, organizes, stores, and moves the data—often in conjunction with an ERP system.

Radio frequency ID (RFID)—a system that labels products with an electronic tag, which stores and transmits information regarding the product's origin, destination, and quantity.

Such real-time information allows manufacturers, suppliers, and distributors to keep track of products and components throughout their manufacturing processes and transportation networks, resulting in greater efficiency and more visibility along the supply chain. The use of RFID in the Las Vegas airport to track luggage has resulted in more accurate sorting, better tracking, and fewer lost bags.[39] In 2003, Walmart mandated that its top suppliers use RFID tags at the pallet level, predicting it could save billions of dollars for the entire retail industry through supply-chain efficiencies.[40] In 2010, it announced it would experiment with placing removable "smart tags" on individual garments such as jeans and underwear that would allow workers to use handheld scanners to identify exact inventory on the shelves or in the backroom. There are concerns over privacy, but RFID tags placed on removable labels or packaging is not as invasive as imbedding them in the clothing, which could then be tracked anywhere.[41] Apple even has an RFID app which can be purchased on iTunes and downloaded to an iPhone or iPad to display the location status of taggable items.

E-COMMERCE

E-commerce—the use of the Internet to join together suppliers with companies and companies with customers.

The next technological wave linking together the parts of the global supply chain is **e-commerce.** To illustrate, Dell's factory in Ireland supplies custom-built PCs all over Europe. Customers transmit orders to Dell via call centers or its website, and the company relays the demand for components to its suppliers. Trucks deliver the components to the factory and haul off the completed computers within a few hours. All of this activity, of course, is made possible by the Internet. Since Walmart moved its EDI-based infrastructure from traditional but expensive value-added networks (VANs) to the Internet, it has been good news for thousands of worldwide vendors. All of their transactions with Walmart are now on the Web—a substantial cost savings for the MNE and its vendors.[42]

Most experts agree that the Internet has revolutionized communications across all levels of the global supply chain, though at different speeds in different areas. The number of worldwide Internet users rose from 420 million in 2000 to more than 2.4 billion in 2013, a growth of 566 percent. There are more internet users in Asia than any other region of the world, but given the large populations in Asia and the small percentage of internet users to the total population, there should be significant growth in Asia in the future.[43]

CONCEPT CHECK

In discussing "Contemporary Approaches to Organizational Change" in Chapter 16, we observe that the Internet, which accelerates the spread of ideas throughout an organization, has become a "metaphor" for organization structure. In other words, as a supremely efficient and effective means of organizing global knowledge, resources, and people, the Internet has inspired many people to imagine new ways of effectively organizing a company's resources (especially its people). We also point out the ironic attractiveness of a self-regulating organizational model that features no formal organizational hierarchy.

Extranets and Intranets Dell has established an **extranet** for its suppliers—a linkage to its information system via the Internet—so they can organize production and delivery of parts. Plugged into Dell's customer database, the suppliers can keep track of changes in demand; plugged into the ordering process, they can track the progress of their orders from factory to doorstep.[44]

The real attraction of the Internet in global supply-chain management is that it not only helps automate and speed up internal processes in a company through an **intranet**, but also spreads efficiency gains to the business systems of its customers and suppliers.[45] The new technology wave is **private technology exchange (PTX)**, an online collaboration model that brings manufacturers, distributors, value-added resellers, and customers together through the Internet to execute trading transactions and share information about demand, production, availability, and more.

Private technology exchange (PTX)—an online collaboration model that brings manufacturers, distributors, value-added resellers, and customers together to execute trading transactions.

"The Digital Divide" The challenge in global supply-chain management is that although some networks can be managed through the Internet, others—particularly in emerging markets—cannot because of the lack of technology or low Internet speeds. The use of the

Internet varies by location and by industry. North America is at least five years ahead of some countries in Europe, especially Eastern Europe, but it is behind Asia, especially in some key infrastructures. Industries such as computing and electronics, aerospace and defense, and motor vehicles are blasting ahead; industrial equipment, food and agriculture, heavy industries, and consumer goods are lagging.

This so-called "digital divide" has created difficulties for companies such as U.S.-based Newmont Mining Corporation. Newmont has struggled to implement its ordering and inventory management information system with its suppliers in Indonesia, who have to rent computers in different towns to even access the Internet and whose managers are typically former farmers who likely have never even used email.[46] It is no coincidence that the leaders in e-commerce are those who have invested significant amounts of money over the years in IT—notably in the defense and motor-vehicle industries.

The preceding discussion shows that IT can help companies manage their global supply chains but it must be carefully integrated into their overall strategy. Because IT is highly technical as well as a support to a company's lines of business, it is often difficult to align it with company strategy. This is especially true in the international arena, where personnel in different countries may be accustomed to their own IT systems and may have difficulty adopting a global IT format that will allow them to achieve some economies of scale as well as fully integrate it in the overall strategy.

QUALITY

Quality—meeting or exceeding the expectations of a customer.

An important aspect of all levels of the global supply chain is quality management, for service firms as well as manufacturers. **Quality** can be defined here as meeting or exceeding customer expectations. More specifically, it is conformance to specifications, value, fitness for use, support (provided by the company), and psychological impressions (image).[47] Quality involves careful design of a product or service and ensuring that an organization's systems can consistently produce the design.[48] For example, no one wants to buy computer software that has a lot of bugs, but the need to get software to market quickly may mean speeding it there as soon as possible and correcting errors later. In the airline industry, service is key. Some airlines, such as Singapore Air, have developed a worldwide reputation for excellence in service—a distinct competitive advantage, especially when trying to attract the business traveler.

Case: Car Quality Quality—or the lack thereof—can have serious ramifications for a company. Ford lost around $1 billion in 2001 due to faulty Firestone tires on its Explorers. Because of this and other quality problems, many automakers began to look at the way the Japanese firms, especially Toyota, manufactured their automobiles with higher efficiency and fewer defects. In the mid-2000s, accidents resulting from the sudden acceleration of Toyota cars called even its defect-free reputation into question. Although no final source of the problem was found (including potential driver error), this was the first of many defects Toyota admitted to. Nevertheless, its nearly perfect report card set off a flight to quality by all auto manufactures trying to emulate its success in ridding autos of defects. In 2011, J.D. Power & Associates named three assembly plants as recipients of its highest award for producing models yielding the fewest defects and malfunctions: Toyota plants in Canada and Japan that produced the Lexus, and a Honda plant in Greensburg, Indiana (U.S.) that makes the Civic. Although all three plants are Japanese-owned, it is interesting that two of the three are outside Japan.[49]

Each year, J.D. Power releases its Vehicle Dependability Study (VDS), which measures automobile quality after three years of ownership. In the 2013 Dependability Ratings, Lexus was the highest nameplate in vehicle dependability, followed by Porsche, Lincoln, Toyota, and Mercedes-Benz. Toyota, which also includes Lexus as one of its brands, led all manufacturers with awards in several different segments. GM earned four, while Honda earned three. Japanese automakers have long dominated the rankings, but these 2013 results exhibited marked improvements for American carmakers, though they still lag the Japanese models. The steady improvement in initial quality ratings for U.S. automakers should be translated into higher dependability rates after three years, so it appears that the focus on quality is narrowing the gap among the top auto manufacturers worldwide.[50]

Zero defects—the refusal to tolerate defects of any kind.

ZERO DEFECTS

Quality now refers to **zero defects**, an idea perfected by Japanese manufacturers who refuse to tolerate flaws of any kind. Before this strong emphasis on getting rid of defects, many companies operated according to the premise of **acceptable quality level (AQL)**, which held that a few faulty products would be dealt with through repair facilities and service warranties. This type of manufacturing/operating environment required buffer inventories, rework stations, and expediting, with the goal of pushing through products as fast as possible and then dealing with the mistakes later. However, world class companies prefer zero defects and they realize that taking quality seriously is the only way to beat the competition.[51]

Deming's 14 Points encompass the idea that the responsibility for quality resides within the policies and practices of managers.

In the late 1970s, when Japanese companies began to seriously outpace those in the United States in achieving high-quality products and processes, a new emphasis was placed on actively managing the operations that affect quality. One contributor to this focus on *quality management*, and one of the people who trained the Japanese in quality, was W. Edwards Deming. To espouse the idea that the responsibility for quality resides within the policies and practices of managers, Deming developed several suggestions on how companies could improve. His focus on quality was designed to reduce the variance in the manufacturing process through statistical control, design, and training and through the policies and practices of managers. He felt that higher quality would lead to lower costs and better acceptance by the consumer.

The emphasis on quality management has continued to provide a major source of competitive advantage and play a major role for companies across the globe. However, just as different countries possess different cultures, product preferences, and business practices, various regions of the world have approached the concept of quality management in various ways. The Japanese have long focused on lean production processes that eliminate waste and boost visibility, whereas the American approach has historically been more statistically based, and the Europeans have opted to concentrate more on quality standards.[52] These varying attitudes toward quality create a high level of complexity for MNEs with global operations. As we will see, however, many of the best practices concerning quality have been perfected in Japan and are being used worldwide.

CONCEPT CHECK

Compare the concept of employee involvement as it's characterized here with the idea of coordination by mutual adjustment, which we discuss in Chapter 16. Both approaches to coordination signal a willingness to coordinate value activities through a range of informal mechanisms, including means by which employees are encouraged to engage one another in decisions about matters of mutual importance.

LEAN MANUFACTURING AND TOTAL QUALITY MANAGEMENT (TQM)

One reason why companies might hesitate when considering whether to source parts from foreign suppliers is because of *lean manufacturing*, the process of reducing waste in all areas of the supply chain.[53] This concept was popularized by the Japanese, especially Toyota, and has been copied or emulated worldwide. Because it relies on the efficiencies gained by reducing waste and defects, lean manufacturing is also closely tied to quality management.

Lean manufacturing—a productive system whose focus is on optimizing processes through the philosophy of continual improvement.

The Japanese approach is known as **total quality management (TQM)**, a process that stresses three principles: *customer satisfaction, continuous improvement,* and *employee involvement*.[54] The goal is to eliminate all defects. TQM often focuses on benchmarking world-class standards, product and service design, process design, and purchasing.[55] The center of the entire process, however, is customer satisfaction, the achievement of which may raise production costs. In TQM, quality means the product is so good that the customer wouldn't think of buying from anyone else.

Total quality management (TQM)—a process that stresses customer satisfaction, employee involvement, and continuous improvement of quality. Its goal is to eliminate all defects.

TQM is a process of continuous improvement at every organizational level—from the mailroom to the boardroom. It implies that the company is doing everything it can to achieve quality at every stage of the process. For example, if management accounting systems are focused strictly on cost, they will preclude measures that could lead to higher quality. The key is to understand the company's overall strategy.

TQM does not use any specific production philosophy or require the use of other techniques, such as a just-in-time system for inventory delivery. It is a proactive strategy. Although benchmarking—determining the best processes used by the best companies—is an important part of TQM, it is not intended to be a goal. In essence, TQM means that a company will try to be better than the best.

Executives who have adopted the zero-defects philosophy of TQM claim that long-run production costs decline as defects decline. The continuous improvement process is also known as *kaizen,* which means identifying problems and enlisting employees at all levels to help eliminate those problems. The key is to make continuous improvement a part of every employee's daily work.

Just-in-time (JIT) approach to inventory management—a system that sources raw materials and parts just as they are needed in the manufacturing process.

An important element of lean manufacturing is just-in-time (JIT) inventory management, which focuses on "reducing inefficiency and unproductive time in the production process to improve continuously the process and the quality of the product or service."[56] The JIT system gets raw materials, parts, and components to the buyer"just in time"for use, sparing companies the cost of storing large inventories.

That is what Dell hoped to accomplish in its Irish plant by having parts delivered just as they were to enter the production process and then go out the door to consumers as soon as the computers were built. However, the use of JIT means that parts must have few defects and must arrive on time. That is why companies need to develop solid supplier relationships to ensure good quality and delivery times if JIT is to work—and why industrial clustering is a popular way of linking more closely with suppliers.

It is hard to combine foreign sourcing and JIT production without having safety stocks of inventory on hand, which defeats the concept of JIT.

Risks in Foreign Sourcing Foreign sourcing can create big risks for companies that use lean manufacturing and JIT because interruptions in the supply line can cause havoc. MNEs are becoming expert at meeting the requirements of JIT: ships that take two weeks to cross the Pacific docking within an hour of scheduled arrival, factories that are able to more easily fill small orders, and so on. However, because of distances alone, the supply chain is open to more problems and delays.[57]

As mentioned earlier in the chapter, companies such as Toyota that have set up manufacturing and assembly facilities overseas to service local markets have practically forced their domestic parts suppliers to move overseas as well to allow them to continue with JIT manufacturing. That is why so many Japanese parts suppliers have moved to the United States and Mexico to be near their major customers.

A company's inventory management strategy—especially in terms of stock sizes and whether JIT will be used—determines the frequency of needed shipments. The less frequent the delivery, the more likely the need to store inventory somewhere. Because JIT requires delivery just as the inventory is to be used, some concession must be made for inventory arriving from foreign suppliers. Since DENSO, one of Toyota's major suppliers, is very close to Toyota's assembly plants in Japan, JIT allows the DENSO components to arrive a matter of a few minutes but no more than a few hours from when they are used. However, Kawasaki Motors Corp., U.S.A., carries a minimum of three days'inventory on parts coming from Japan, with an average inventory of five days.[58]

U.S. Synthetics, a company based in Utah, used to ship some of their parts from Eastern Africa. However, these shipments became unreliable when Somalia pirates began taking ships hostage and demanding a ransom in return for the stolen goods. U.S. Synthetics now makes these parts in-house so they don't have to worry about when the shipments will arrive.

A *kanban* system facilitates JIT by using cards to control the flow of production through a factory.

The Kanban System One system pioneered by Toyota to facilitate its JIT strategies is the *kanban system,* named after the Japanese word for"card"or"visible record."Kanban cards are used to control the flow of production through a factory. In the system used by Toyota, components are shipped to a plant just before they need to go into production, where they are kept in a bin with an attached card identifying the quantity of items in the bin. When the assembly process begins, a production-order card signifies that a bin needs to be moved to the assembly line. When the bin is emptied, it is moved to a storage area and replaced with a full bin. The kanban card is then removed from the empty bin and is used to order a replacement from the supplier.

SIX SIGMA

Six Sigma—a quality control system aimed at eliminating defects, slashing product cycle times, and cutting costs across the board.

Six Sigma is an effective statistical approach to quality management developed by Motorola and popularized by General Electric. As a highly focused system of quality control that scrutinizes a company's entire production system, it aims to eliminate defects, slash product cycle times, and cut costs across the board. The system uses data and rigorous statistical analysis to identify "defects" in a process or product, reduce variability, and achieve as close to zero defects as possible.[59] General Electric has operationalized Six Sigma on a project basis using the acronym DMAIC. This refers to define (especially customers and their priorities), measure (the process and its performance), analyze (determine the most likely cause of defects), improve (determine how to remove the causes of the defects), and control (maintain the improvements).[60]

Since being introduced by Motorola in the 1980s, Six Sigma has been adopted by many MNEs, including GE, GlaxoSmithKline, and Lockheed Martin. Although some have accused the program of diverting attention away from customers and squashing innovation, most of the 100 largest companies in the United States have embraced it.[61] Its main goal is defect reduction, and fewer defects should cause an improvement in yields, which should improve customer satisfaction and then lead to enhanced income. Given that Six Sigma is a metric designed to measure defects, some argue that it is most effective when used in conjunction with the Baldrige Criteria for Excellence or the European Quality Award.[62]

QUALITY STANDARDS

There are three different levels of quality standards: *general, industry-specific,* and *company-specific.* The first is a general standard, such as the Deming Award, which is presented to firms that demonstrate excellence in quality, or the Malcolm Baldrige National Quality Award, which is presented annually to companies that demonstrate quality strategies and achievements. However, even more important than awards is certification of quality.

Levels of quality standards:

- General level—ISO 9000, Malcolm Baldrige National Quality Award
- Industry-specific level
- Company level

General-Level Standards

The **International Organization for Standardization (ISO)** in Geneva was formed in 1947 to facilitate the international coordination and unification of industrial standards. From the beginning, it has partnered with the IEC (International Electrotechnical Commission), which is the originator of global technical standards. It also collaborates with the International Telecommunications Union and the World Trade Organization. As an NGO, the ISO represents a network of standard setters in 162 countries and has established over 19,500 international quality standards.[63]

ISO 9000—a global set of quality standards intended to promote quality at every level of an organization.

ISO 14000—a quality standard concerned with environmental management.

ISO 9000 and ISO 14000

Even with more than 19,000 standards in the ISO, new ones are being published every year, including nearly 1,300 in 2012. The two main families of standards are ISO 9000, which describes the fundamentals of quality management systems, and ISO 14000, which addresses what the company does to improve its environmental performance. However, many different areas have ISO standards.

ISO 9000 is a set of universal standards for a quality assurance system that is accepted around the world. Applying uniformly to companies in any industry and of any size, it is intended to promote the idea of quality at every organizational level. Initially it was designed to harmonize technical norms within the EU. Now it is an important part of business operations throughout Europe. Under the ISO 9000 family of standards, companies must document how workers perform every function affecting quality and install mechanisms to ensure that they follow through on the documented routine. The documentation is generic and applicable to any organization that makes products or provides services. A major advantage of ISO 9000 is the documentation process, which not only requires workers to examine what they do to improve quality but also ensures continuity as workers change positions.

ISO certification entails a complex analysis of management systems and procedures, not just quality-control standards. Rather than judging the quality of a particular product, ISO evaluates the management of the manufacturing or service process according to the standards it has created in 20 domains, from purchasing to design to training. The operational principles of its management-system standards are: plan, do, check, and act (correct and improve plans). A company that wants to be ISO-certified must fill out a report and submit to certification by a team of independent auditors.[64] The process can be expensive and time-consuming, as each site of a company must be separately certified. The ISO 14000 family of standards is designed to help companies establish high-quality environmental standards in terms of air, water and soil, ensure that environmental standards are followed, and develop products and services that are environmentally friendly.

Most MNEs claim ISO certification, but ISO is not the solution to all quality issues. One estimate holds that in some places, including China, as much as 40 percent of ISO certifications are falsified.[65] However, being certified will help suppliers obtain more business, especially with European companies.

Non-European companies operating in Europe need to become ISO certified in order to maintain access to that market.

U.S. companies that operate in Europe seek ISO certification to maintain access to its market. When DuPont lost a major European contract to an ISO-certified European company, it decided to become certified. By doing so, not only was it able to position itself better in Europe, it also benefited from the experience of going through the certification process and focusing on quality in and of itself. Some European companies are so committed to ISO that they will not do business with a certified company if its suppliers are not also ISO-certified. They want to be sure that quality flows back to every level of the supply chain.

Industry-Specific Standards In addition to the general standards described earlier, there are industry-specific standards for quality, especially for suppliers to follow. Since ISO standards are relatively generic, some industries, such as the auto industry, have developed more specific ones to fit the industry. One such example is QS9000, which was initially required for any supplier of Ford and General Motors. However, it was eventually replaced by ISO/TS 16949:2009, which was more applicable to the auto industry. It is supposed to be used in conjunction with ISO 9001, and it defines the quality management system requirements for the design, development, production, installation, and service of automotive-related products.[66]

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Case Review Note

Company-Specific Standards Individual companies also set their own standards for suppliers to meet if they are going to continue to supply them. Apple, for example, sets safety and employment standards for its suppliers, and in 2013 it conducted 393 audits at all levels of the supply chain, including 40 specialized process safety assessments to evaluate suppliers' operations and business practices.[67] In the service sector, global public accounting firms, such as KPMG and PWC, have set high audit practices that it expects its affiliates around the world to use. This is always complicated since public accounting firms are an association of individual national partnerships operating under one name. However, the audit of a multinational client must be performed to high standards.

FOREIGN TRADE ZONES

Foreign trade zones (FTZs)—special locations for storing domestic and imported inventory in order to avoid paying duties until the inventory is used in production or sold.

Once products are manufactured and ready to be shipped to customers, they can be shipped directly or they can be stored in warehouses until they are ready to be used. One way to store products is to use a foreign trade zone to shield products from tariffs. In recent years, **foreign trade zones (FTZs)** have become more popular as an intermediate step in the process between import and final use. FTZs are areas in which domestic and imported merchandise can be stored, inspected, and manufactured free from formal customs procedures until the goods leave the zones. They are intended to encourage firms to locate in the country by allowing them to defer duties, pay fewer duties, or avoid certain duties completely. Sometimes inventory is stored in an FTZ until it needs to be used for domestic manufacture. As noted earlier, one problem with JIT is the length of the supply line when relying on global sourcing, possibly causing either the buyer or the supplier to stockpile inventory somewhere until it is needed in the manufacturing process. One place to stockpile inventory is in a warehouse in an FTZ.

GENERAL-PURPOSE ZONES AND SUBZONES

A general-purpose FTZ is usually established near a port of entry, such as a shipping port, a border crossing, or an airport, and usually consists of a distribution facility or an industrial park used primarily for warehousing and distribution. A subzone is usually physically separate from a general-purpose zone but under the same administrative structure, commonly located at a manufacturing facility. Since 1982, the major growth in FTZs has been in subzones rather than in general-purpose zones because companies have sought to defer duties on parts that are foreign-sourced until they need to be used in the production process.

Dubai in the United Arab Emirates has established 18 different free zones, including Jebel Ali Free Zone Authority, Dubai Healthcare City, Dubai International Financial Center, Dubai Media City, and Dubai Internet City. The advantage of these free zones is that they allow 100 percent ownership of an enterprise, 100 percent repatriation of capital and profits, no minimum capital investment, no corporate or personal tax, and no need for a local partner. Different zones focus on different industries. For example, the major banks, financial, and law firms are in the DIFC; CNN, BBC, CNBC, and Dow Jones Thomson Reuters are in the Media Center; and Cox Internet, Hughes Satellite and Internet, and ATT Internet are in Internet City. Jebel Ali Free Zone includes standard assembly operations that one would find in any similar free zone. For instance, Unilever has a major tea factory in the Free Zone that is one of their largest in the world. It receives raw materials from different countries, packages them in the Free Zone, and ships them around the world.[68]

The major growth in subzones in the United States has been in the automobile industry, especially in the Midwest. Subzone activity is spreading to other industries, especially shipbuilding, pharmaceuticals, and home appliances, and is becoming more heavily oriented to manufacturing and assembly than was originally envisioned. Merchandise in U.S. FTZs may be assembled, exhibited, cleaned, manipulated, manufactured, mixed, processed, relabeled, repackaged, repaired, salvaged, sampled, stored, tested, displayed, and destroyed.[69]

The United States has about 250 general-purpose zones and more than 500 subzones in all 50 states and Puerto Rico. Over $300 billion a year in merchandise is handled in the FTZs, and $19 billion is exported from them each year.[70] FTZs in the United States have been used primarily as a means of providing greater flexibility as to when and how customs duties are paid. However, their use in the export business has been expanding.

The benefits to a zone user are:

- No duties or quota charges on goods imported into a zone and re-exported
- Customs duties and federal excise tax deferred on imports until taken from the zone and used in the domestic market
- Duties reduced if foreign inputs that enter the zone at one duty are higher than the duty would have been on the finished product leaving the zone for domestic sales (called an *inverted tariff*)
- Streamlined customs procedures
- Elimination of state and local inventory taxes if the goods are held in the zone for export[71]

TRANSPORTATION NETWORKS

Transportation links together suppliers, companies, and customers.

Just as Apple used UPS to ship Mandy her iPhone in the opening case, companies have to figure out the best way to ship goods from supplier to factory and from factory to customer. For a firm, transporting goods in an international context is extremely complicated in terms of documentation, choice of carrier (air or ocean), and the decision of whether to establish its own transportation department or outsource to a third party intermediary. Transportation is a crucial element of a logistics system. The key is to link together suppliers and manufacturers on the one hand and manufacturers and final consumers on the other. Along the way, the company has to determine its warehouse configuration. For example, in providing food items to its franchises around the world, McDonald's has warehouses in different countries to service different geographic areas.

Case: Panalpina As outsourcing of both manufacturing and other supply-chain functions grows ever more popular, third-party intermediaries are essential in storing and transporting goods. They constitute an important dimension of transportation networks. Panalpina is a Swiss forwarding and logistics services provider that focuses on intercontinental airfreight and sea freight, as well as other aspects of supply-chain management. Using its main hub in Luxembourg to connect to 500 offices in 80 countries throughout the world and partners in another 60 countries, Panalpina seeks to simplify the complexity of its customers' supply chains by handling their transportation, distribution, customs brokerage, warehousing, and inventory control, as well as providing door-to-door transport insurance and real-time track-and-trace systems.[72]

An example of how Panalpina services its clients involves IBM and its operations in Latin America. Through its selected airfreight services provider, ASB-Air, and through the management of its local branches, Panalpina coordinates vehicles to pick up IBM products in Europe and transport them to Luxembourg. From there, the goods travel by air to the cargo center in Miami, where products destined for various locations in South America are split and reconsolidated into pallets that are then loaded directly into Panalpina's space-controlled aircraft and transferred to its own company warehouses operated by its own staff. The warehouse personnel complete all customs details, taking advantage of the on-site offices of customs authorities, and update the company's information systems with current status messages.

Once customs has been cleared, an electronic data transfer is sent to IBM while the goods are shipped to IBM warehouses. Panalpina maintains control of the goods throughout the entire process, using electronic documentation and tracking to maintain real-time data and keep IBM informed. In this example, you can see all of the elements of transportation networks that are so essential in international logistics.[73]

The logistics management that companies like Panalpina engage in is very detail-oriented, requiring the ability to gather, track, and process large quantities of information. To be effective, logistics companies need to implement key technologies, including communication systems, satellite tracking systems, bar-coding applications, and automated materials-handling systems.[74] It is interesting to note how important the "Flatteners" are in this part of the supply chain network and how critical the third-party logistics companies are to ensuring the smooth flow of products around the world.

Looking to the Future

Uncertainty and the Global Supply Chain

Two competing ideas have been emphasized in this chapter: First, globalization has pushed companies to establish operations abroad or to outsource to foreign suppliers to reduce costs and be closer to markets; second, the longer the supply line, the greater the risk. Since September 11, 2001, the risks of longer supply lines have increased dramatically. At any time, global political events could completely disrupt a well-organized supply chain and put a company at risk. This was demonstrated more recently in 2011 with the earthquake and tsunami in Japan.

Because some of Sara Lee's suppliers have consolidated, there are fewer options for purchasing key ingredients for Sara Lee products. What if no supplier could deliver because of political events or safety/quality concerns? Ford Motor Company's announcement that the economic slowdown was forcing it to cut its suppliers by 50 percent created a ripple effect throughout the auto industry, since suppliers tend to supply many different companies.

As a supply chain stretches and uncertainty grows, companies have to become much better at scenario building so that viable contingencies are available. Maybe this means they will pursue more multidomestic strategies to insulate their foreign operations from other countries and allow them to be more responsive to local consumers. However, as MNEs in the developed countries respond to competitive pressures to reduce costs, they will be forced to continue sourcing abroad, either in company-owned facilities or from third parties—at least until nobody can source abroad.

That's probably a little extreme, but the important thing is to continue to look at the "what-ifs." What if there is no secure air or ocean transportation available to move goods? What if the goods can move, but there are delays? What if terrorists begin to use the global supply chain of legitimate companies to contaminate products or move hazardous materials? Clearly, the future appears much more complicated than current or past conditions, so let the manager beware. These uncertainties as well as high oil and other transportation costs plus escalating costs in China, the manufacturing floor of the world, are causing many firms to look closer to home for their sourcing decisions. ■

CASE Nokero: Lighting the World[75]

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In June 2013, Steve Katsaros, founder and CEO of Nokero, was contemplating how to build on his company's accomplishments. Nokero, a marketer of solar light bulbs, has emerged as a successful born-global social enterprise. Since its establishment in 2010, Nokero had sold more than 600,000 solar light bulbs to over 120 countries. The company has generated significant media attention. *CNN, The New York Times* (online), *The Washington Post, Fast Company, Popular Mechanics, Popular Science, The Denver Post*, and *Engadget,* to name just a few, have featured Nokero's story of doing well by doing good as a provider of environmentally-friendly solar lighting to the world's poor. Katsaros himself has been recognized for his humanitarian work. In April 2013, he was awarded the US Patent Office's Patent for Humanity Award.

While Katsaros was very pleased with his company's overall performance to date, he was concerned with three fundamental questions. First, how should the company grow? Specifically, what market segments should the company focus on for profitable growth? Several opportunities had propelled Nokero's sales since 2011. The company has sold tens of thousands of solar bulbs in small and sample order sales through the company's website from thousands of customers in North America and abroad. Additionally, Nokero has entered into distributorship or dealer agreements in several countries. For example, Nokero has engaged Eureka Forbes to distribute its solar lights in India. Finally, governments, international agencies, and non-governmental organizations have partnered with or approached Nokero on collaborative social programs relating to environmental sustainability, renewable energy, poverty alleviation, and disaster and relief projects. Katsaros wanted to make sure that Nokero explores the best pathways for growth in both the social enterprise sector and commercial channels.

Second, where should the company grow? Currently, Nokero has pursued an opportunistic sales approach. The company's major customers are in diverse and dispersed locations in Kenya, Ghana, South Africa, Fiji, Mexico, India, Nigeria, Haiti, and other markets. Although practical business sense may dictate that international new ventures like Nokero focus on a few markets at a time, Katsaros was hesitant to pursue this approach since it contradicted

Steve Katsaros, founder and CEO of Nokero, shows a group of children how his innovative solar light works.
Source: Steve Katsaros

the company's social mission of reaching out to as many people as possible that could benefit from Nokero's solar light bulbs.

Third, how should Nokero manage its supply chain to support the company's growth? Katsaros understood that growth brings a number of challenges that requires Nokero to address critical global supply chain issues effectively. How can the company serve different market and customer segments that are dispersed in many countries? How can Nokero bring down sourcing, manufacturing, and distribution costs to make the product more affordable to its customers? What should the company do to address the "last mile issue" of reaching customers in the most remote locations?

The Nokero Story

Identifying the Opportunity

Nokero (short for "No Kerosene") was established by Steve Katsaros in order to develop safe and environmentally friendly solar products that eliminated the need for harmful and polluting fuels used for light and heat around the world and are affordable to the customers that need them. Katsaros saw a significant opportunity in developing a solar light product to replace kerosene and diesel lanterns. Katsaros described the opportunity as follows:

> "In many parts of the world, non-electrified dwellings and workplaces are illuminated by kerosene or diesel lamps, candles or wood. There are electric options but most are expensive, or fragile, or don't have replaceable, rechargeable batteries."

More than 1.3 billion people live without electricity. Of these, 704 million people are in South Asia, 550 million in Sub-Saharan Africa, and 225 million in Southeast Asia. Many of these people live in remote areas and rely on kerosene and diesel-fueled lanterns for their lighting. By substituting solar light bulbs for kerosene lanterns, these people are able to recoup their purchase price within a period of 12 days to 2 months, depending on market forces. Moreover, the replacement of kerosene lanterns with solar light bulbs generates significant environmental and health benefits. Every solar light that replaces a kerosene lantern saves three-quarters of a ton of CO2 emissions over the five-year lifetime of the product. According to the World Bank, daily exposure to emissions from kerosene lanterns is like smoking two packs of cigarettes per day.

Inventing the Solution: The N100 and N200

Katsaros invented the first Nokero light bulb (the Nokero N100) on January 24, 2010, drawing a sketch of the idea on a notepad. Four days later, he filed a U.S. patent on the N100 that was eventually granted in February 2011. Production on the light bulb commenced in June 2010 and a new model, the N200, was introduced in November 2010.

The Nokero solar light bulb is a small, lightweight, portable light, shaped like a light bulb for easy identification. The bulb hangs in the sun to charge and can be hung or laid on its side at night. A "pivot" feature allows users to swivel the solar panel toward the sun to maximize charge capability. The bulb can be swiveled at night to direct light where needed. The LED lights are enclosed in the shatter resistant bulb, do not get hot, and produce an even light. (See the photo on the next page.)

The N200's brightness is 14 lumens on high illumination and 8 lumens on low illumination. The duration of light is 6-8 hours on one day's charge or 12-16 hours on 2-days charge on the low light setting. For the high light setting, the light duration is 2.5 hours on one day's charge and 5 hours on 2-days charge. While the brightness is not the same as traditional LED lighting, the N200's brightness is five times brighter than that of a kerosene lantern. The N200 is shatter- and rain-proof and built to last for 5 years.

Nokero sells the N200 in large quantity orders (e.g., over 1,000 light bulbs) for about $6.00 (FOB China). Sample sales are priced between $15-$20 (depending on shipping costs). In response to strong market feedback for a low-price starter version of the Nokero Solar bulbs, Katsaros has been working on a more basic version that could sell for about half the price of the N200.

The Nokero solar light bulb is a small, lightweight, portable light, shaped like a light bulb for easy identification. The bulb hangs in the sun to charge and can be hung or laid on its side at night. A "pivot" feature allows users to swivel the solar panel toward the sun to maximize charge capability.
Source: Institute for International Business

Building a Born-Global Company

A few weeks after developing the N100, Katsaros worked on Nokero's business model, package design, pricing, and manufacturing and distribution processes. In April 2010, he formed Nokero International Ltd., the operating company of Nokero.

The speed by which Nokero developed and manufactured the N100 and formed the business entity could be attributed to Katsaros' experience as an inventor and entrepreneur. He had previously licensed inventions to sports companies, such as Dynastar Skis, K2, and HaberVision, and built RevoPower, a motorized wheel for bicycles that gets 200 miles per gallon at 20 miles per hour. A BS Mechanical Engineering graduate from Purdue University, a Bard Center for Entrepreneurship certificate graduate recipient at the University of Colorado Denver, and a Collegiate Inventors Competition awardee, Katsaros is a patent agent registered with the U.S. Patent Office and Trademark Office which has issued him several patents for his previous inventions.

From the start, Nokero was a "born-global company" with customers in different parts of the world, and co-owners and supplier partners in Hong Kong and China. Katsaros partnered with three Hong Kong-based entrepreneurs to form Nokero International Ltd. in Hong Kong. These partners, associates of Katsaros in previous businesses, provided start-up capital that represented a minority equity interest in Nokero and helped Katsaros find a strong and reliable factory supplier in China. Nokero also leveraged the HK partners' connections with the factory supplier to secure a trade financing line from the supplier. The HK partners manage Nokero's operations, including overseeing the supplier factory in China, filling large orders directly from the factory, maintaining an outsourced fulfillment center in Shenzhen, China to supply small and sample sales from all over the world, and managing the company's supply chain.

Nokero's Chinese supplier is an established factory that has significant experience and scale in consumer electronics. In solar-powered consumer electronic products alone, the supplier produces more than 30 million pieces of solar products every year. The supplier's clients include Costco, Walmart, Home Depot, Lowes, and other major retail customers in the U.S. and Europe. Nokero maintains its headquarters in Denver, Colorado, where the company oversees sales and marketing, business development, web-based sales, and overall administration of the business.

Creating Groundswell Support

Widespread and favorable coverage by traditional and social media outlets has been instrumental in getting the Nokero story out to as many people as possible. A key moment came with a six-minute daytime television segment featuring Katsaros and Nokero with Ali Velshi on the CNN show "The Big Eye." Not only did the coverage reach a global audience, it helped legitimize Nokero to those who were interested in solar lighting in general and Nokero's products in particular.

Nokero has benefited from dozens of stories by traditional print media and TV networks and hundreds of stories from new and social media, including sources from abroad such as O Globo (Brazil), Sydney Times (Australia), Air France, and Sudwestrundfunk (Germany). In a story entitled "A Solar Light Bulb May Light the Way," *The New York Times* noted that "Where Nokero's bulb appears to break ground is in its design; it is small enough to carry, self-contained, highly durable and features a replaceable battery." In another article, "The Power of Light," *The Denver Post* lauded the environmental, health, and safety benefits of Nokero's products and the social entrepreneurial aspects of the company's business model. These major stories resulted in a boost in traffic to Nokero's website and new orders for samples, as well as inquiries from prospective distributors.

Social media, particularly blogs, have been a powerful way for the company to create community groundswell support. In July 2010, an influential London businessman offered support to the company, an offer that led to an endorsement of Nokero's products by popular soccer star Didier Drogba. Social media have also been instrumental in creating awareness and mobilizing community participation in social initiatives championed by Nokero and other partners. For example, Nokero has partnered with Project C.U.R.E. on a buy-give program. Under this program, customers who buy a solar light bulb from Nokero can give a second light bulb to Project C.U.R.E. that the latter will distribute to people in need throughout the world.

Similarly, filmmaker Kurt Mann's organization, American Green, brought light bulbs to Haiti to help victims who have been devastated by the country's earthquake. Nokero and America Green have jointly set up a program, "The Gift of Light," for people to donate light bulbs to Haiti. Mann also filmed a short video during one of his recent visits to Haiti to document how Nokero's products have helped the people of Haiti and the world's poor by providing ready access to light. Nokero and third parties have used this video widely to help tell the company's story. Nokero has also been quick to respond to natural calamities, such as the earthquake in Japan or Hurricane Sandy in the U.S. East Coast by donating solar bulbs to victims, as well as instituting a program that led to the donation of these solar bulbs.

Growing the Business

Opportunities in Working with Governments and International Organizations

Several governments, international non-governmental organizations, and international agencies have approached Katsaros and Nokero on a number of potential large-scale partnerships and projects. The governments of Mexico and Congo are pursuing the idea of buying Nokero's products for distribution to people in their respective countries who are earning less than $2 per day (i.e., bottom of the pyramid consumers) and do not have access to electricity. Through a partner in the Philippines, Nokero is exploring how best to provide its solar light bulbs to school children from poor families who still rely on kerosene lanterns.

Nokero has also initiated discussions with international agencies, such as the United Nations, USAID, and various international foundations. While governments and international organization sales represent attractive opportunities for Nokero, they have posed three major challenges. First, the sales cycle in these organizations tends to be long and requires specialized skills and major business development resources. To address this challenge, Nokero has brought on board a consultant who is knowledgeable and has networked with these kinds of entities.

Second, the company would have to significantly scale production to fill larger orders from these governments. The governments that Nokero has been dealing with have talked about buying not thousands but *millions* of light bulbs. In addition, these governments are also likely to pressure Nokero to lower its price. Third, selling to these governments portends production and supply chain challenges. Katsaros is also anticipating that governments that place large orders from Nokero would require the company to produce or assemble its products locally.

Opportunities in the Social Enterprise Sector

As previously mentioned, Nokero has been engaged in partnership programs with various social enterprises, such as Project C.U.R.E. (Commission on Urgent Relief and Equipment), Elephant Energy, Earthspark International, Shelterbox, Child Fund, and Power the World. As a case in point, Nokero and Project C.U.R.E. began the Lights for Life Campaign in 2010 whereby Nokero solar bulbs were added to the C.U.R.E. Kits for Kids (i.e. shoebox-sized kits of everyday healthcare supplies, including bandages, antibiotic ointments, and insect repellent) and provided to parents who might not otherwise have access to an everyday medicine cabinet.

In contrast to working with governments and international organizations, partnerships with social enterprises entail a different set of challenges for Nokero. The programs championed by these partners are quite diverse, the customers that they serve are widely dispersed, and their order amounts tend to be smaller, although purchases are made more frequently. All of these considerations require different order and fulfillment mechanisms in Nokero's supply chain. While these processes may be more demanding, Katsaros is committed to working with micro-business and the social enterprise sector, since serving the people that these enterprises reach out to is at the core of Nokero's mission.

Opportunities in Commercial Channels

Nokero has driven sales through the commercial channel in two ways: through direct, web-based sales and through licensed distributors. Customers order directly through Nokero's website (Nokero.com) and pay using a credit card or an account through PayPal. Once an order is placed and payment is verified, the order is added to a sales spreadsheet and is exported nightly to Nokero's fulfillment center, which handles the order deliveries. Nokero fills order using Hong Kong Post or Singapore Post. The customer can then log on to Nokero's website to track the shipment of their package and order history by entering the email address that they used to place the order.

Since 2011, Nokero has been successful in selling tens of thousands of dollars of light bulbs to more than 120 countries through its website. Accordingly, one major opportunity that Katsaros sees in this channel is sales conversion—i.e., converting people who have placed sample orders to sign up as distributors. Nokero would like to put in place a strategy or process for such sales conversion other than a form on its website which invites people to apply to become distributors.

The company's largest customers are distributors, associations, and individuals that have ordered thousands of light bulbs, including Anzocare (South African Alternative Energy Association) and major individual distributors from India, Kenya, Zambia, Ghana, and Fiji. Additional distributors are in place in Afghanistan, Australia, Nigeria, Central America, Cote D' Ivoire, Mali, Burkina Faso, and Vietnam. Large commercial orders are filled directly from Nokero's factory in China via the port of Shenzhen, China. Nokero's outsourced fulfillment partner in Shenzhen, China serves smaller orders.

Addressing Supply Chain Issues

As previously mentioned, Katsaros understands that the success of Nokero's business hinges on its ability to address critical supply chain issues. Katsaros and his Hong Kong partners must ensure that the company is ready to fill both large and concentrated orders from government and international organizations, as well as sample and small order sales from hundreds of customers that are geographically dispersed. At this point, Nokero needs to evaluate whether it should bring on board a second or third supplier that will support its major supplier partner in China. Moreover, it needs to evaluate the locations of the company's fulfillment centers.

In addition, Katsaros needs to address some operational issues related to supply chain management. These include:

1. *Payments and Pricing of Shipping Charges*. Currently, customers who order through the website pay by credit card or PayPal. However, PayPal is not accepted in all countries, particularly in some markets that represent attractive markets for Nokero in Asia and Africa. In addition, determining the correct amount to charge for shipping has been a challenge since Nokero's fulfillment center does not provide a live feed with updated international pricing of shipping charges, and in general it is extremely difficult to reliably estimate the cost of shipping small orders to all the regions of the world.
2. *Order Tracking*. Tracking information usually stops once the package has left China (i.e., the Chinese factory location or fulfillment center in Shenzhen) making the tracking information limited and less useful.
3. *Timely Delivery*. Orders are filled and shipped in a timely manner from Nokero's factory and fulfillment center. However, the delivery process relies heavily on the timeliness and reliability of the postal system in the receiving country. In some instances, it has taken months for a sample or small order to be delivered to the customer.
4. *Last Mile Issue*. Often Nokero's customers are in remote locations that cannot be accessed by regular postal delivery. Even social enterprises and government organizations that partner with Nokero find it challenging to reach users in remote locations. The significance of the last mile issue is not just about getting the products to the beneficial users but educating them about product attributes and usage. As Katsaros noted, "this cannot be done through a website or a product manual, it is better if someone local can communicate with and demonstrate the products to users." To this end, Nokero is testing a model in Kenya where it has partnered with a Procter and Gamble distributor who has a strong reach and connections with customers in remote locations. Nokero has also hired a local employee to help with the communication and distribution of these products to Kenyan customers, as well as to work with its distributor. If successful, Nokero hopes to replicate this model in other markets.

Katsaros knows that the *growth* strategy that Nokero chooses to pursue will have important implications for the company's supply chain strategy, processes, and probable results. In turn, generating greater efficiencies in distribution and the supply chain will be critical to Nokero's ability to lower its price and make its products more affordable to its customers. Katsaros wants to ensure that Nokero effectively addresses the key strategic and tactical issues related to the management of the company's supply chain, which will in turn help the company in anticipating and capitalizing on further and faster growth in the coming years.

QUESTIONS

18-3. What manufacturing strategy should Nokero pursue? Should it continue to supply all of its light bulb orders from a single factory location in China?

18-4. In terms of distribution networks, should Nokero maintain fulfillment warehouses in Africa, Asia, and Latin America? How should Nokero address the last mile issue of accessing people in the most remote locations?

18-5. How should Nokero build its distribution footprint in international markets? What regions should it emphasize?

18-6. A number of potential distributors have asked Nokero for exclusive rights in key geographic markets. Should Nokero grant exclusive country distribution rights? What performance standards or metrics should Nokero put in place for distributors?

SUMMARY

- A company's supply chain encompasses the coordination of materials, information, and funds from the initial raw-materials supplier to the ultimate customer.
- "Operations" refers to the processes internal to the company, such as manufacturing, inventory control, etc. The supply chain and operations bring together supplier inputs, prepare the product for the consumer, and ensure delivery.
- The success of a global operations strategy depends on compatibility, configuration, coordination, and control.
- Cost-minimization strategies and the drive for global efficiencies often force MNEs offshore to low-cost manufacturing areas, especially in Asia and Eastern Europe.
- Manufacturing can be configured as centralized, regional, and multidomestic facilities. Offshoring is where the facilities are moved from the home country to another country.
- Global sourcing is the process of supplying raw materials and parts to a firm from domestic and foreign sources. Outsourcing means engaging another company to perform a limited function that was being done in-house, such as payroll, whether domestic or offshore. Supply-chaining is the process in which another company makes the firm's goods, such as Walmart purchasing goods from suppliers that it sells in its stores. Suppliers can be domestic or offshore.
- Domestic sourcing allows a company to avoid problems related to language, culture, currency, tariffs, and so forth. Foreign sourcing allows the company to reduce costs and improve quality, among other things.
- Under the make-or-buy decision, companies have to decide whether to make their own parts or buy them from an independent company.
- Companies go through different purchasing phases as they become more committed to global sourcing.
- When a company sources parts from suppliers around the world, distance, time, and the uncertainty of political and economic environments can make it difficult to manage inventory flows accurately.
- The key to making a global supply-chain system work is information. Companies are rapidly turning to the Internet as a way to link suppliers with manufacturing and eventually with end-use customers.
- Total quality management (TQM) is a process that emphasizes customer satisfaction, employee involvement, and continuous improvements in quality while aiming for zero defects.
- Lean manufacturing and just-in-time systems focus on reducing inefficiency and unproductive time in the production process to continuously improve the process and the quality of the product or service.
- Quality is defined as meeting or exceeding the expectations of customers. Quality standards can be general level (ISO 9000), industry-specific, or company-specific (zero defects, TQM, and Six Sigma).
- The transportation system links together suppliers with manufacturers and manufacturers with customers.

KEY TERMS

acceptable quality level (AQL) (p. 714)
contract manufacturer (p. 706)
e-commerce (p. 712)
electronic data interchange (EDI) (p. 711)
enterprise resource planning (ERP) (p. 711)
extranet (p. 712)
foreign trade zones (FTZs) (p. 717)
industrial clusters (p. 708)
International Organization for Standardization (ISO) (p. 716)
intranet (p. 712)
logistics (or materials management) (p. 699)
offshore manufacturing (p. 700)
operations (p. 700)
operations management (p. 699)
outsourcing (p. 705)
private technology exchange (PTX) (p. 712)
quality (p. 713)
Six Sigma (p. 715)
sourcing (p. 704)
supply chain (p. 698)
total quality management (TQM) (p. 714)
vertical integration (p. 707)
zero defects (p. 714)

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