

skaters are using, Pegasus is the only brand that is truly designed for and by skaters. The few competitors' sails on the market are not designed for skating, but for windsurfing or for skateboards. In the case of foils, storage and carrying are not practical. There are different indirect competitors who are manufacturers of the actual skates. After many years in the market, these companies have yet to become direct competitors by manufacturing accessories for the skates that they make.

2.4 Product Offering

Pegasus Sports International now offers several products:

- The first product that has been developed is BladeBoots, a cover for the wheels and frame of inline skates, which allows skaters to enter places that normally would not allow them in with skates on. BladeBoots come with a small pouch and belt that converts to a well-designed skate carrier.
- The second product is SkateSails. These sails are specifically designed for use while skating. Feedback that Pegasus has received from skaters indicates skatesailing could become a very popular sport. Trademarking this product is currently in progress.
- The third product, SkateAid, will be in production by the end of the year. Other ideas for products are under development, but will not be disclosed until Pegasus can protect them through pending patent applications.

2.5 Keys to Success

The keys to success are designing and producing products that meet market demand. In addition, Pegasus must ensure total customer satisfaction. If these keys to success are achieved, it will become a profitable, sustainable company.

2.6 Critical Issues

As a start-up business, Pegasus is still in the early stages. The critical issues are for Pegasus to:

- Establish itself as the premier skating accessory company.
- Pursue controlled growth that dictates that payroll expenses will never exceed the revenue base. This will help protect against recessions.
- Constantly monitor customer satisfaction, ensuring that the growth strategy will never compromise service and satisfaction levels.

3.0 Marketing Strategy

The key to the marketing strategy is focusing on the speed, health and fitness, and recreational skaters. Pegasus can cover about 80% of the skating market because it produces products geared toward each segment. Pegasus is able to address all of the different segments within the market because, although each segment is distinct in terms of its users and equipment, its products are useful to all of the different segments.

3.1 Mission

Pegasus Sports International's mission is to provide the customer with the finest skating accessories available. "We exist to attract and maintain customers. With a strict adherence to this maxim, success will be ensured. Our services and products will exceed the expectations of the customers."

3.2 Marketing Objectives

- Maintain positive, strong growth each quarter (notwithstanding seasonal sales patterns).
- Achieve a steady increase in market penetration.
- Decrease customer acquisition costs by 1.5% per quarter.

3.3 Financial Objectives

- Increase the profit margin by 1% per quarter through efficiency and economy-of-scale gains.
- Maintain a significant research and development budget (as a percentage relative to sales) to spur future product developments.
- Achieve a double- to triple-digit growth rate for the first three years.

3.4 Target Markets

With a world skating market of over 31 million that is steadily growing (statistics released by the Sporting Goods Manufacturers Association), the niche has been created. Pegasus' aim is to expand this market by promoting SkateSailing, a new sport that is popular in both Santa Monica and Venice Beach in California. The Sporting Goods Manufacturers Association survey indicates that skating now has more participation than football, softball, skiing, and snowboarding combined. The breakdown of participation in skating is as follows: 1+% speed (growing), 8% hockey (declining), 7% extreme/aggressive (declining), 22% fitness (nearly 7 million—the fastest growing), and 61% recreational (first-timers). Pegasus' products are targeting the fitness and recreational groups, because they are the fastest growing. These groups are gearing themselves toward health and fitness, and combined, they can easily grow to 85% (or 26 million) of the market in the next five years.

3.5 Positioning

Pegasus will position itself as the premier aftermarket skating accessory company. This positioning will be achieved by leveraging Pegasus' competitive edge: industry experience and passion. Pegasus is a skating company formed by skaters for skaters. Its management is able to use its vast experience and personal passion for the sport to develop innovative, useful accessories for a broad range of skaters.

3.6 Strategies

The single objective is to position Pegasus as the premier skating accessory manufacturer, serving the domestic market as well as the international market. The marketing strategy will seek to first create customer awareness concerning the offered products and services and then develop the customer base. The message that Pegasus will seek to communicate is that it offers the best-designed, most useful skating accessories. This message will be communicated through a variety of methods. The first will be the Pegasus Web site, which will provide a rich source of product information and offer consumers the opportunity to purchase. A lot of time and money will be invested in the site to provide the customer with the perception of total professionalism and utility for Pegasus' products and services.

The second marketing method will be advertisements placed in numerous industry magazines. The skating industry is supported by several different glossy magazines designed to promote the industry as a whole. In addition, a number of smaller periodicals serve the smaller market segments within the skating industry. The last method of communication is the use of printed sales literature. The two previously mentioned marketing methods will create demand for the sales literature, which will be sent out to customers. The cost of the sales literature will be fairly minimal, because it will use the already-compiled information from the Web site.

3.7 Marketing Program

Pegasus' marketing program is comprised of the following approaches to pricing, distribution, advertising and promotion, and customer service.

- **Pricing.** This will be based on a per-product retail price.
- **Distribution.** Initially, Pegasus will use a direct-to-consumer distribution model. Over time, it will use retailers as well.
- **Advertising and promotion.** Several different methods will be used for the advertising effort.
- **Customer service.** Pegasus will strive to achieve benchmarked levels of customer care.

3.8 Marketing Research

Pegasus is blessed with the good fortune of being located in the center of the skating world: Venice, California. It will be able to leverage this opportune location by working with many of the different skaters that live in the area. Pegasus was able to test all of its products not only with its principals, who are accomplished skaters, but also with the many other dedicated and "newbie" users located in Venice. The extensive product testing by a wide variety of users provided Pegasus with valuable product feedback and has led to several design improvements.

4.0 Financials

This section will offer the financial overview of Pegasus related to marketing activities. Pegasus will address break-even analysis, sales forecasts, expense forecast, and indicate how these activities link to the marketing strategy.

4.1 Break-Even Analysis

The break-even analysis indicates that \$7,760 will be required in monthly sales revenue to reach the break-even point.

TABLE 4.1 Break-Even Analysis

Break-Even Analysis:	
Monthly Units Break-Even	62
Monthly Sales Break-Even	\$ 7,760
Assumptions:	
Average Per-Unit Revenue	\$125.62
Average Per-Unit Variable Cost	\$ 22.61
Estimated Monthly Fixed Cost	\$ 6,363

4.2 Sales Forecast

Pegasus feels that the sales forecast figures are conservative. It will steadily increase sales as the advertising budget allows. Although the target market forecast (Table 2.1) listed all of the potential customers divided into separate groups, the sales forecast groups customers into two categories: recreational and competitive. Reducing the number of categories allows the reader to quickly discern information, making the chart more functional.

Monthly Sales Forecast

TABLE 4.2 Sales Forecast

Sales Forecast			
Sales	2011	2012	2013
Recreational	\$455,740	\$598,877	\$687,765
Competitive	\$ 72,918	\$ 95,820	\$110,042
Total Sales	\$528,658	\$694,697	\$797,807
Direct Cost of Sales	2011	2012	2013
Recreational	\$ 82,033	\$107,798	\$123,798
Competitive	\$ 13,125	\$ 17,248	\$ 19,808
Subtotal Cost of Sales	\$ 95,158	\$125,046	\$143,606

4.3 Expense Forecast

The expense forecast will be used as a tool to keep the department on target and provide indicators when corrections/modifications are needed for the proper implementation of the marketing plan.

Milestones

TABLE 4.3 Milestones

Plan					
Milestones	Start Date	End Date	Budget	Manager	Department
Marketing plan completion	1/1/11	2/1/11	\$ 0	Stan	Marketing
Web site completion	1/1/11	3/15/11	\$20,400	outside firm	Marketing
Advertising campaign #1	1/1/11	6/30/11	\$ 3,500	Stan	Marketing
Advertising campaign #2	3/1/11	12/30/11	\$ 4,550	Stan	Marketing
Development of the retail channel	1/1/11	11/30/11	\$ 0	Stan	Marketing
Totals			\$28,450		

Monthly Expense Budget

TABLE 4.4 Marketing Expense Budget

Marketing Expense Budget	2011	2012	2013
Web Site	\$ 25,000	\$ 8,000	\$ 10,000
Advertisements	\$ 8,050	\$ 15,000	\$ 20,000
Printed Material	\$ 1,725	\$ 2,000	\$ 3,000
Total Sales and Marketing Expenses	\$ 34,775	\$ 25,000	\$ 33,000
Percent of Sales	6.58%	3.60%	4.14%
Contribution Margin	\$398,725	\$544,652	\$621,202
Contribution Margin/Sales	75.42%	78.40%	77.86%

5.0 Controls

The purpose of Pegasus' marketing plan is to serve as a guide for the organization. The following areas will be monitored to gauge performance:

- Revenue: monthly and annual
- Expenses: monthly and annual

- Customer satisfaction
- New-product development

5.1 Implementation

The following milestones identify the key marketing programs. It is important to accomplish each one on time and on budget.

5.2 Marketing Organization

Stan Blade will be responsible for the marketing activities.

5.3 Contingency Planning

Difficulties and Risks

- Problems generating visibility, a function of being an Internet-based start-up organization
- An entry into the market by an already-established market competitor

Worst-Case Risks

- Determining that the business cannot support itself on an ongoing basis
- Having to liquidate equipment or intellectual capital to cover liabilities

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PART 2 Capturing Marketing Insights

Chapter 3 | Collecting Information and Forecasting Demand

Chapter 4 | Conducting Marketing Research

Chapter 3



In This Chapter, We Will Address
the Following **Questions**

1. What are the components of a modern marketing information system?
2. What are useful internal records for such a system?
3. What makes up a marketing intelligence system?
4. What are some influential macroenvironment developments?
5. How can companies accurately measure and forecast demand?

The severe economic recession that began in 2008 led many firms to cut their prices and use sales to try to retain customers.

Collecting Information and Forecasting Demand

Making marketing decisions in a fast-changing world is both an art and a science. To provide context, insight, and inspiration for marketing decision making, companies must possess comprehensive, up-to-date information about macro trends, as well as about micro effects particular to their business. Holistic marketers recognize that the marketing environment is constantly presenting new opportunities and threats, and they understand the importance of continuously monitoring, forecasting, and adapting to that environment.



The severe credit crunch and economic slowdown of 2008–2009 brought profound changes in consumer behavior as shoppers cut and reallocated spending. Sales of discretionary purchases like toys, apparel, jewelry, and home furnishings dropped. Sales of luxury brands like Mercedes—driven for years by free-spending baby boomers—declined by a staggering one-third.

Meanwhile, brands that offered simple, affordable solutions prospered. General Mills's revenues from such favorites as Cheerios, Wheaties, Progresso soup, and Hamburger Helper rose. Consumers also changed how and where they shopped, and sales of low-priced private label brands soared. Virtually all marketers were asking themselves whether a new age of prudence and frugality had emerged and, if so, what would be the appropriate response.

Firms are adjusting the way they do business for more reasons than just the economy. Virtually every industry has been touched by dramatic shifts in the technological, demographic, social-cultural, natural, and political-legal environments. In this chapter, we consider how firms can develop processes to identify and track important macroenvironment trends. We also outline how marketers can develop good sales forecasts. Chapter 4 will review how they conduct more customized research on specific marketing problems.

Components of a Modern Marketing Information System

The major responsibility for identifying significant marketplace changes falls to the company's marketers. Marketers have two advantages for the task: disciplined methods for collecting information, and time spent interacting with customers and observing competitors and other outside groups. Some firms have marketing information systems that provide rich detail about buyer wants, preferences, and behavior.

DuPont

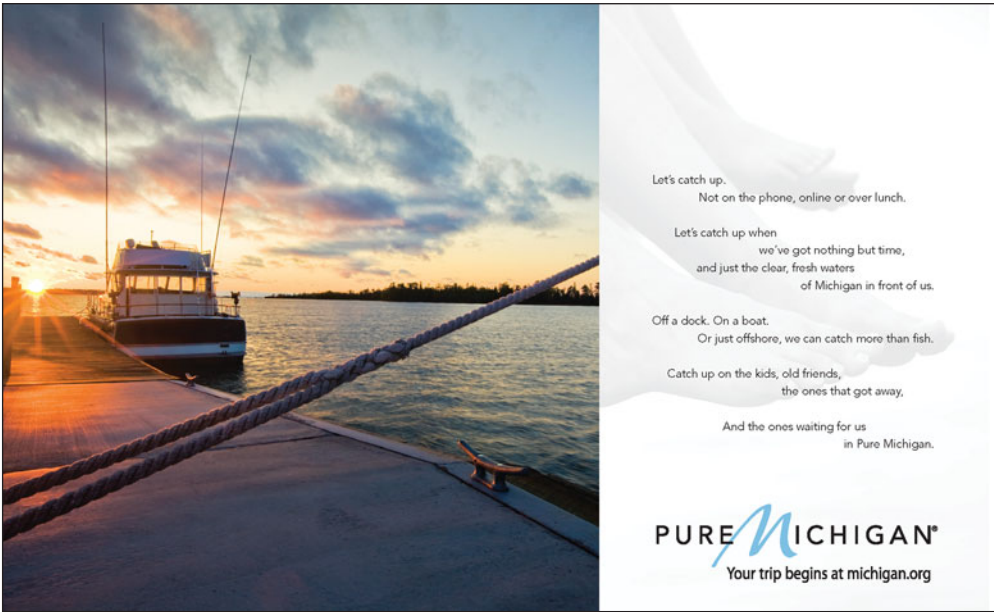
DuPont DuPont commissioned marketing studies to uncover personal pillow behavior for its Dacron Polyester unit, which supplies filling to pillow makers and sells its own Comforel brand. One challenge is that people don't give up their old pillows: 37 percent of one sample described their relationship with their pillow as being like that of "an old married couple," and an additional 13 percent said their pillow was like a "childhood friend." Respondents fell into distinct groups in terms of pillow behavior: stackers (23 percent), plumpers (20 percent), rollers or folders (16 percent), cuddlers (16 percent), and smashers, who pound their pillows into a more comfy shape (10 percent). Women were more likely to plump, men to fold. The prevalence of stackers led the company to sell more pillows packaged as pairs, as well as to market different levels of softness or firmness.¹

Marketers also have extensive information about how consumption patterns vary across and within countries. On a per capita basis, for example, the Swiss consume the most chocolate, the Czechs the most beer, the Portuguese the most wine, and the Greeks the most cigarettes. Table 3.1 summarizes these and other comparisons across countries. Consider regional differences within the United States: Seattle's residents buy more toothbrushes per person than in any other U.S. city, people in Salt Lake City eat more candy bars, New Orleans residents use more ketchup, and people in Miami drink more prune juice.²

TABLE 3.1 A Global Profile of Extremes

Highest fertility rate	Niger	6.88 children per woman
Highest education expenditure as percent of GDP	Kiribati	17.8% of GDP
Highest number of mobile phone subscribers	China	547,286,000
Largest number of airports	United States	14,951 airports
Highest military expenditure as percent of GDP	Oman	11.40% of GDP
Largest refugee population	Pakistan	21,075,000 people
Highest divorce rate	Aruba	4.4 divorces per 1,000 population
Highest color TV ownership per 100 households	United Arab Emirates	99.7 TVs
Mobile telephone subscribers per capita	Lithuania	138.1 subscribers per 100 people
Highest cinema attendance	India	1,473,400,000 cinema visits
Biggest beer drinkers per capita	Czech Republic	81.9 litres per capita
Biggest wine drinkers per capita	Portugal	33.1 litres per capita
Highest number of smokers per capita	Greece	8.2 cigarettes per person per day
Highest GDP per person	Luxembourg	\$87,490
Largest aid donors as % of GDP	Sweden	1.03% of GDP
Most economically dependent on agriculture	Liberia	66% of GDP
Highest population in workforce	Cayman Islands	69.20%
Highest percent of women in workforce	Belarus	53.30%
Most crowded road networks	Qatar	283.6 vehicle per km of road
Most deaths in road accidents	South Africa	31 killed per 100,000 population
Most tourist arrivals	France	79,083,000
Highest life expectancy	Andorra	83.5 years
Highest diabetes rate	United Arab Emirates	19.5% of population aged 20–79

Source: CIA World Fact Book, <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>, accessed July 24, 2009; *The Economist's Pocket World in Figures*, 2009 edition, www.economist.com.



A well-researched and well-executed marketing campaign for the state of Michigan increased tourism and state tax revenue.

Companies with superior information can choose their markets better, develop better offerings, and execute better marketing planning. The Michigan Economic Development Corporation (MEDC) studied the demographic information of its visitors and those of competing Midwestern cities to create a new marketing message and tourism campaign. The information helped MEDC attract 3.8 million new trips to Michigan, \$805 million in new visitor spending, and \$56 million in incremental state tax revenue over the period 2004–2008.³

Every firm must organize and distribute a continuous flow of information to its marketing managers. A **marketing information system (MIS)** consists of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers. It relies on internal company records, marketing intelligence activities, and marketing research. We'll discuss the first two components here, and the third one in the next chapter.

The company's marketing information system should be a mixture of what managers think they need, what they really need, and what is economically feasible. An internal MIS committee can interview a cross-section of marketing managers to discover their information needs. Table 3.2 displays some useful questions to ask them.

TABLE 3.2 Information Needs Probes	
1.	What decisions do you regularly make?
2.	What information do you need to make these decisions?
3.	What information do you regularly get?
4.	What special studies do you periodically request?
5.	What information would you want that you are not getting now?
6.	What information would you want daily? Weekly? Monthly? Yearly?
7.	What online or offline newsletters, briefings, blogs, reports, or magazines would you like to see on a regular basis?
8.	What topics would you like to be kept informed of?
9.	What data analysis and reporting programs would you want?
10.	What are the four most helpful improvements that could be made in the present marketing information system?

Internal Records

To spot important opportunities and potential problems, marketing managers rely on internal reports of orders, sales, prices, costs, inventory levels, receivables, and payables.

The Order-to-Payment Cycle

The heart of the internal records system is the order-to-payment cycle. Sales representatives, dealers, and customers send orders to the firm. The sales department prepares invoices, transmits copies to various departments, and back-orders out-of-stock items. Shipped items generate shipping and billing documents that go to various departments. Because customers favor firms that can promise timely delivery, companies need to perform these steps quickly and accurately. Many use the Internet and extranets to improve the speed, accuracy, and efficiency of the order-to-payment cycle.

Fossil Group

Fossil Group Fossil Group Australia designs and distributes accessories and apparel globally. Its account executives lacked the latest information about pricing and inventory while taking wholesale orders. High demand items were often out of stock, creating problem for retailers. After the firm deployed a mobile sales solution that connected account executives with current inventory data, the number of sales tied up in back orders fell 80 percent. The company can now provide retailers with actual inventory levels and ship orders in hours instead of days.⁴

Sales Information Systems

Marketing managers need timely and accurate reports on current sales. Walmart operates a sales and inventory data warehouse that captures data on every item for every customer, every store, every day and refreshes it every hour. Consider the experience of Panasonic.



Panasonic Panasonic makes digital cameras, plasma televisions, and other consumer electronics. After missing revenue goals, the company decided to adopt a vendor-managed inventory solution. Inventory distribution then came in line with consumption, and availability of products to customers jumped from 70 percent to 95 percent. The average weeks that product supply sat in Panasonic's channels went from 25 weeks to just 5 weeks within a year, and unit sales of the targeted plasma television rose from 20,000 to approximately 100,000. Best Buy, the initial retailer covered by the vendor-managed inventory model, has since elevated Panasonic from a Tier 3 Supplier to a Tier 1 "Go-To" Brand for plasma televisions.⁵



Panasonic's new vendor-managed inventory system met with marketplace success, including from retailers.

Companies that make good use of "cookies," records of Web site usage stored on personal browsers, are smart users of targeted marketing. Many consumers are happy to cooperate: A recent survey showed that 49 percent of individuals agreed cookies are important to them when using the Internet. Not only do they *not* delete cookies, but they also expect customized marketing appeals and deals once they accept them.

Companies must carefully interpret the sales data, however, so as not to draw the wrong conclusions. Michael Dell gave this illustration: "If you have three yellow Mustangs sitting on a dealer's lot and a customer wants a red one, the salesman may be really good at figuring out how to sell the yellow Mustang. So the yellow Mustang gets sold, and a signal gets sent back to the factory that, hey, people want yellow Mustangs."⁶

Databases, Data Warehousing, and Data Mining

Companies organize their information into customer, product, and salesperson databases—and then combine their data. The customer database will contain every customer's name, address, past transactions, and sometimes even demographics and psychographics (activities, interests, and opinions). Instead of sending a mass “carpet bombing” mailing of a new offer to every customer in its database, a company will rank its customers according to factors such as purchase recency, frequency, and monetary value (RFM) and send the offer to only the highest-scoring customers. Besides saving on mailing expenses, such manipulation of data can often achieve a double-digit response rate.

Companies make these data easily accessible to their decision makers. Analysts can “mine” the data and garner fresh insights into neglected customer segments, recent customer trends, and other useful information. Managers can cross-tabulate customer information with product and salesperson information to yield still-deeper insights. Using in-house technology, Wells Fargo can track and analyze every bank transaction made by its 10 million retail customers—whether at ATMs, at bank branches, or online. When it combines transaction data with personal information provided by customers, Wells Fargo can come up with targeted offerings to coincide with a customer's life-changing event. As a result, compared with the industry average of 2.2 products per customer, Wells Fargo sells 4 products.⁷ Best Buy is also taking advantage of these new rich databases.



Best Buy Best Buy has assembled a 15-plus terabyte database with seven years of data on 75 million households. It captures information about every interaction—from phone calls and mouse clicks to delivery and rebate-check addresses—and then deploys sophisticated algorithms to classify over three-quarters of its customers, or more than 100 million individuals, into profiled categories such as “Buzz” (the young technology buff), “Jill” (the suburban soccer mom), “Barry” (the wealthy professional guy), and “Ray” (the family man). The firm also applies a customer lifetime value model that measures transaction-level profitability and factors in customer behaviors that increase or decrease the value of the relationship. Knowing so much about consumers allows Best Buy to employ precision marketing and customer-triggered incentive programs with positive response rates.⁸



Best Buy uses a massive database to develop profiles with which to classify its customers.

Marketing Intelligence

The Marketing Intelligence System

A **marketing intelligence system** is a set of procedures and sources that managers use to obtain everyday information about developments in the marketing environment. The internal records system supplies *results* data, but the marketing intelligence system supplies *happenings* data. Marketing managers collect marketing intelligence in a variety of different ways, such as by reading books, newspapers, and trade publications; talking to customers, suppliers, and distributors; monitoring social media on the Internet; and meeting with other company managers.

Before the Internet, sometimes you just had to go out in the field, literally, and watch the competition. This is what oil and gas entrepreneur T. Boone Pickens did. Describing how he learned about a rival's drilling activity, Pickens recalls, “We would have someone who would watch [the rival's] drilling floor from a half mile away with field glasses. Our competitor didn't like it but there wasn't anything they could do about it. Our spotters would watch the joints and drill pipe. They would count them; each [drill] joint was 30 feet long. By adding up all the joints, you would be able to tally the depth of the well.” Pickens knew that the deeper the well, the more costly it would be for his rival to get the oil or gas up to the surface, and this information provided him with an immediate competitive advantage.⁹

Marketing intelligence gathering must be legal and ethical. In 2006, the private intelligence firm Diligence paid auditor KPMG \$1.7 million for having illegally infiltrated it to acquire an audit of a Bermuda-based investment firm for a Russian conglomerate. Diligence's cofounder posed as a British intelligence officer and convinced a member of the audit team to share confidential documents.¹⁰

A company can take eight possible actions to improve the quantity and quality of its marketing intelligence. After describing the first seven, we devote special attention to the eighth, collecting marketing intelligence on the Internet.

- ***Train and motivate the sales force to spot and report new developments.*** The company must “sell” its sales force on their importance as intelligence gatherers. Grace Performance Chemicals, a division of W. R. Grace, supplies materials and chemicals to the construction and packaging industries. Its sales reps were instructed to observe the innovative ways customers used its products in order to suggest possible new products. Some were using Grace waterproofing materials to soundproof their cars and patch boots and tents. Seven new-product ideas emerged, worth millions in sales.¹¹
- ***Motivate distributors, retailers, and other intermediaries to pass along important intelligence.*** Marketing intermediaries are often closer to the customer and competition and can offer helpful insights. ConAgra has initiated a study with some of its retailers such as Safeway, Kroger, and Walmart to study how and why people buy its foods. Finding that shoppers who bought their Orville Redenbacher and Act II brands of popcorn tended to also buy Coke, ConAgra worked with the retailers to develop in-store displays for both products. Combining retailers' data with its own qualitative insights, ConAgra learned that many mothers switched to time-saving meals and snacks when school started. It launched its “Seasons of Mom” campaign to help grocers adjust to seasonal shifts in household needs.¹²
- ***Hire external experts to collect intelligence.*** Many companies hire specialists to gather marketing intelligence.¹³ Service providers and retailers send mystery shoppers to their stores to assess cleanliness of facilities, product quality, and the way employees treat customers. Health care facilities' use of mystery patients has led to improved estimates of wait times, better explanations of medical procedures, and less-stressful programming on the waiting room TV.¹⁴
- ***Network internally and externally.*** The firm can purchase competitors' products, attend open houses and trade shows, read competitors' published reports, attend stockholders' meetings, talk to employees, collect competitors' ads, consult with suppliers, and look up news stories about competitors.
- ***Set up a customer advisory panel.*** Members of advisory panels might include the company's largest, most outspoken, most sophisticated, or most representative customers. For example, GlaxoSmithKline sponsors an online community devoted to weight loss and says it is learning far more than it could have gleaned from focus groups on topics from packaging its weight-loss pill to where to place in-store marketing.¹⁵
- ***Take advantage of government-related data resources.*** The U.S. Census Bureau provides an in-depth look at the population swings, demographic groups, regional migrations, and changing family structure of the estimated 304,059,724 people in the United States (as of July 1, 2008). Census marketer Nielsen Claritas cross-references census figures with consumer surveys and its own grassroots research for clients such as The Weather Channel, BMW, and Sovereign Bank. Partnering with “list houses” that provide customer phone and address information, Nielsen Claritas can help firms select and purchase mailing lists with specific clusters.¹⁶
- ***Purchase information from outside research firms and vendors.*** Well-known data suppliers include firms such as the A.C. Nielsen Company and Information Resources Inc. They collect information about product sales in a variety of categories and consumer exposure to various media. They also gather consumer-panel data much more cheaply than marketers manage on their own. Biz360 and its online content partners, for example, provide real-time coverage and analysis of news media and consumer opinion information from over 70,000 traditional and social media sources (print, broadcast, Web sites, blogs, and message boards).¹⁷

Collecting Marketing Intelligence on the Internet

Thanks to the explosion of outlets available on the Internet, online customer review boards, discussion forums, chat rooms, and blogs can distribute one customer's experiences or evaluation

to other potential buyers and, of course, to marketers seeking information about the consumers and the competition. There are five main ways marketers can research competitors' product strengths and weaknesses online.¹⁸

- **Independent customer goods and service review forums.** Independent forums include Web sites such as Epinions.com, RateItAll.com, ConsumerReview.com, and Bizrate.com. Bizrate.com collects millions of consumer reviews of stores and products each year from two sources: its 1.3 million volunteer members, and feedback from stores that allow Bizrate.com to collect it directly from their customers as they make purchases.
- **Distributor or sales agent feedback sites.** Feedback sites offer positive and negative product or service reviews, but the stores or distributors have built the sites themselves. Amazon.com offers an interactive feedback opportunity through which buyers, readers, editors, and others can review all products on the site, especially books. Elance.com is an online professional services provider that allows contractors to describe their experience and level of satisfaction with subcontractors.
- **Combo sites offering customer reviews and expert opinions.** Combination sites are concentrated in financial services and high-tech products that require professional knowledge. ZDNet.com, an online advisor on technology products, offers customer comments and evaluations based on ease of use, features, and stability, along with expert reviews. The advantage is that a product supplier can compare experts' opinions with those of consumers.
- **Customer complaint sites.** Customer complaint forums are designed mainly for dissatisfied customers. PlanetFeedback.com allows customers to voice unfavorable experiences with specific companies. Another site, Complaints.com, lets customers vent their frustrations with particular firms or offerings.
- **Public blogs.** Tens of millions of blogs and social networks exist online, offering personal opinions, reviews, ratings, and recommendations on virtually any topic—and their numbers continue to grow. Firms such as Nielsen's BuzzMetrics and Scout Labs analyze blogs and social networks to provide insights into consumer sentiment.

Communicating and Acting on Marketing Intelligence

In some companies, the staff scans the Internet and major publications, abstracts relevant news, and disseminates a news bulletin to marketing managers. The competitive intelligence function works best when it is closely coordinated with the decision-making process.¹⁹



Ticket broker StubHub monitors online activity so that when confusion arose over a rainout at a New York Yankees game, for instance, it was able to respond quickly.

Given the speed of the Internet, it is important to act quickly on information gleaned online. Here are two companies that benefited from a proactive approach to online information:²⁰

- When ticket broker StubHub detected a sudden surge of negative sentiment about its brand after confusion arose about refunds for a rain-delayed Yankees–Red Sox game, it jumped in to offer appropriate discounts and credits. The director of customer service observed, “This [episode] is a canary in a coal mine for us.”
- When Coke’s monitoring software spotted a Twitter post that went to 10,000 followers from an upset consumer who couldn’t redeem a prize from a MyCoke rewards program, Coke quickly posted an apology on his Twitter profile and offered to help resolve the situation. After the consumer got the prize, he changed his Twitter avatar to a photo of himself holding a Coke bottle.

Analyzing the Macroenvironment

Successful companies recognize and respond profitably to unmet needs and trends.

Needs and Trends

Enterprising individuals and companies manage to create new solutions to unmet needs. Dockers was created to meet the needs of baby boomers who could no longer fit into their jeans and wanted a physically and psychologically comfortable pair of pants. Let’s distinguish among fads, trends, and megatrends.

- A **fad** is “unpredictable, short-lived, and without social, economic, and political significance.” A company can cash in on a fad such as Crocs clogs, Elmo TMX dolls, and Pokémon gifts and toys, but getting it right requires luck and good timing.²¹
- A direction or sequence of events with momentum and durability, a **trend** is more predictable and durable than a fad; trends reveal the shape of the future and can provide strategic direction. A trend toward health and nutrition awareness has brought increased government regulation and negative publicity for firms seen as peddling unhealthy food. Macaroni Grill revamped its menu to include more low-calorie and low-fat offerings after a wave of bad press: *The Today Show* called its chicken and artichoke sandwich “the calorie equivalent of 16 Fudgesicles,” and in its annual list of unhealthy restaurant dishes, *Men’s Health* declared its 1,630 calorie dessert ravioli the “worst dessert in America.”²²
- A **megatrend** is a “large social, economic, political, and technological change [that] is slow to form, and once in place, influences us for some time—between seven and ten years, or longer.”²³
- To help marketers spot cultural shifts that might bring new opportunities or threats, several firms offer social-cultural forecasts. The Yankelovich Monitor interviews 2,500 people nationally each year and has tracked 35 social value and lifestyle trends since 1971, such as “anti-bigness,” “mysticism,” “living for today,” “away from possessions,” and “sensuousness.” A new market opportunity doesn’t guarantee success, of course, even if the new product is technically feasible. Market research is necessary to determine an opportunity’s profit potential.

Identifying the Major Forces

The end of the first decade of the new century brought a series of new challenges: the steep decline of the stock market, which affected savings, investment, and retirement funds; increasing unemployment; corporate scandals; stronger indications of global warming and other signs of deterioration in the national environment; and of course, the rise of terrorism. These dramatic events were accompanied by the continuation of many existing trends that have already profoundly influenced the global landscape.²⁴

Firms must monitor six major forces in the broad environment: demographic, economic, social-cultural, natural, technological, and political-legal. We’ll describe them separately, but remember that their interactions will lead to new opportunities and threats. For example, explosive population growth (demographic) leads to more resource depletion and pollution (natural), which leads consumers to call for more laws (political-legal), which stimulate new technological solutions and products (technological) that, if they are affordable (economic), may actually change attitudes and behavior (social-cultural).

The Demographic Environment

Demographic developments often move at a fairly predictable pace. The main one marketers monitor is *population*, including the size and growth rate of population in cities, regions, and nations; age distribution and ethnic mix; educational levels; household patterns; and regional characteristics and movements.

WORLDWIDE POPULATION GROWTH World population growth is explosive: Earth's population totaled 6.8 billion in 2010 and will exceed 9 billion by 2040.²⁵ Table 3.3 offers an interesting perspective.²⁶

Population growth is highest in countries and communities that can least afford it. Developing regions of the world currently account for 84 percent of the world population and are growing at 1 percent to 2 percent per year; the population in developed countries is growing at only 0.3 percent.²⁷ In developing countries, modern medicine is lowering the death rate, but the birthrate remains fairly stable.

A growing population does not mean growing markets unless there is sufficient purchasing power. Care and education of children can raise the standard of living but are nearly impossible to accomplish in most developing countries. Nonetheless, companies that carefully analyze these markets can find major opportunities. Sometimes the lessons from developing markets are helping businesses in developed markets. See "Marketing Insight: Finding Gold at the Bottom of the Pyramid."

POPULATION AGE MIX Mexico has a very young population and rapid population growth. At the other extreme is Italy, with one of the world's oldest populations. Milk, diapers, school supplies, and toys will be more important products in Mexico than in Italy.

There is a global trend toward an aging population. In 1950, there were only 131 million people 65 and older; in 1995, their number had almost tripled to 371 million. By 2050, one of ten people worldwide will be 65 or older. In the United States, boomers—those born between 1946 and 1964—represent a market of some 36 million, about 12 percent of the population. By 2011, the 65-and-over population will be growing faster than the population as a whole in each of the 50 states.²⁸

Marketers generally divide the population into six age groups: preschool children, school-age children, teens, young adults age 20 to 40, middle-aged adults 40 to 65, and older adults 65 and

TABLE 3.3 The World as a Village

If the world were a village of 100 people:
<ul style="list-style-type: none"> 61 villagers would be Asian (of that, 20 would be Chinese and 17 would be Indian), 14 would be African, 11 would be European, 8 would be Latin or South American, 5 would be North American, and only one of the villagers would be from Australia, Oceania, or Antarctica.
<ul style="list-style-type: none"> At least 18 villagers would be unable to read or write but 33 would have cellular phones and 16 would be online on the Internet.
<ul style="list-style-type: none"> 18 villagers would be under 10 years of age and 11 would be over 60 years old. There would be an equal number of males and females.
<ul style="list-style-type: none"> There would be 18 cars in the village.
<ul style="list-style-type: none"> 63 villagers would have inadequate sanitation.
<ul style="list-style-type: none"> 32 villagers would be Christians, 20 would be Muslims, 14 would be Hindus, 6 would be Buddhists, 16 would be non-religious, and the remaining 12 would be members of other religions.
<ul style="list-style-type: none"> 30 villagers would be unemployed or underemployed, while of those 70 who would work, 28 would work in agriculture (primary sector), 14 would work in industry (secondary sector), and the remaining 28 would work in the service sector (tertiary sector).
<ul style="list-style-type: none"> 53 villagers would live on less than two U.S. dollars a day. One villager would have AIDS, 26 villagers would smoke, and 14 villagers would be obese.
<ul style="list-style-type: none"> By the end of a year, one villager would die and two new villagers would be born so the population would climb to 101.

Source: David J. Smith and Shelagh Armstrong, *If the World Were a Village: A Book About the World's People*, 2nd ed. (Tonawanda, NY: Kids Can Press, 2002).




Finding Gold at the Bottom of the Pyramid

Business writer C.K. Prahalad believes much innovation can come from developments in emerging markets such as China and India. He estimates there are 5 billion unserved and underserved people at the so-called “bottom of the pyramid.” One study showed that 4 billion people live on \$2 or less a day. Firms operating in those markets have had to learn how to do more with less.


In Bangalore, India, Narayana Hrudayalaya Hospital charges a flat fee of \$1,500 for heart bypass surgery that costs 50 times as much in the United States. The hospital has low labor and operating expenses and an assembly-line view of care that has specialists focus on their own area. The approach works—the hospital's mortality rates are half those of U.S. hospitals. Narayana also operates on hundreds of infants for free and profitably insures 2.5 million poor Indians against serious illness for 11 cents a month.

Overseas firms are also finding creative solutions in developing countries. In Brazil, India, Eastern Europe, and other markets, Microsoft launched its pay-as-you-go FlexGo program, which allows users to pre-pay to use a fully loaded PC only for as long as wanted or needed without having to pay the full price the PC would normally command. When the payment runs out, the PC stops operating and the user prepaays again to restart it.

Other firms find “reverse innovation” advantages by developing products in countries like China and India and then distributing them globally. After GE successfully introduced a \$1,000 handheld electrocardiogram device for rural India and a portable, PC-based ultrasound



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IS HELPING ENSURE THAT PEOPLE IN REMOTE AREAS
ARE NEVER FAR FROM QUALITY HEALTHCARE.
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machine for rural China, it began to sell them in the United States. Nestlé repositioned its low-fat Maggi brand dried noodles—a popular, low-priced meal for rural Pakistan and India—as a budget-friendly health food in Australia and New Zealand.

Sources: C.K. Prahalad, *The Fortune at the Bottom of the Pyramid* (Upper Saddle River, NJ: Wharton School Publishing, 2010); Bill Breen, “C.K. Prahalad: Pyramid Schemer,” *Fast Company*, March 2007, p. 79; Pete Engardio, “Business Prophet: How C.K. Prahalad Is Changing the Way CEOs Think,” *BusinessWeek*, January 23, 2006, pp. 68–73; Reena Jane, “Inspiration from Emerging Economies,” *BusinessWeek*, March 23 and 30, 2009, pp. 38–41; Jeffrey R. Immelt, Vijay Govindarajan, and Chris Trimble, “How GE Is Disrupting Itself,” *Harvard Business Review*, October 2009, pp. 56–65; Peter J. Williamson and Ming Zeng, “Value-for-Money Strategies for Recessionary Times,” *Harvard Business Review*, March 2009, pp. 66–74.

older. Some marketers focus on **cohorts**, groups of individuals born during the same time period who travel through life together. The defining moments they experience as they come of age and become adults (roughly ages 17 through 24) can stay with them for a lifetime and influence their values, preferences, and buying behaviors.

ETHNIC AND OTHER MARKETS Ethnic and racial diversity varies across countries. At one extreme is Japan, where almost everyone is Japanese; at the other is the United States, where nearly 25 million people—more than 9 percent of the population—were born in another country. As of the 2000 census, the U.S. population was 72 percent White, 13 percent African American, and 11 percent Hispanic. The Hispanic population has been growing fast and is expected to make up 18.9 percent of the population by 2020; its largest subgroups are of Mexican (5.4 percent), Puerto Rican (1.1 percent), and Cuban (0.4 percent) descent. Asian Americans constituted 3.8 percent of the U.S. population; Chinese are the largest group, followed by Filipinos, Japanese, Asian Indians, and Koreans, in that order.

The growth of the Hispanic population represents a major shift in the nation's center of gravity. Hispanics made up half of all new workers in the past decade and will account for 25 percent of

workers in two generations. Despite lagging family incomes, their disposable income has grown twice as fast as the rest of the population and could reach \$1.2 trillion by 2012. From the food U.S. consumers eat, to the clothing, music, and cars they buy, Hispanics are having a huge impact.

Companies are scrambling to refine their products and marketing to reach this fastest-growing and most influential consumer group:²⁹ Research by Hispanic media giant Univision suggests 70 percent of Spanish-language viewers are more likely to buy a product when it's advertised in Spanish. Fisher-Price, recognizing that many Hispanic mothers did not grow up with its brand, shifted away from appeals to their heritage. Instead, its ads emphasize the joy of mother and child playing together with Fisher-Price toys.³⁰

Several food, clothing, and furniture companies have directed products and promotions to one or more ethnic groups.³¹ Yet marketers must not overgeneralize. Within each ethnic group are consumers quite different from each other.³² For instance, a 2005 Yankelovich Monitor Multicultural Marketing study separated the African American market into six sociobehavioral segments: Emulators, Seekers, Reachers, Attainers, Elites, and Conservers. The largest and perhaps most influential are the Reachers (24 percent) and Attainers (27 percent), with very different needs. Reachers, around 40, are slowly working toward the American dream. Often single parents caring for elderly relatives, they have a median income of \$28,000 and seek the greatest value for their money. Attainers have a more defined sense of self and solid plans for the future. Their median income is \$55,000, and they want ideas and information to improve their quality of life.³³

Diversity goes beyond ethnic and racial markets. More than 51 million U.S. consumers have disabilities, and they constitute a market for home delivery companies, such as Peapod, and for various drugstore chains.

EDUCATIONAL GROUPS The population in any society falls into five educational groups: illiterates, high school dropouts, high school diplomas, college degrees, and professional degrees. Over two-thirds of the world's 785 million illiterate adults are found in only eight countries (India, China, Bangladesh, Pakistan, Nigeria, Ethiopia, Indonesia, and Egypt); of all illiterate adults in the world, two-thirds are women.³⁴ The United States has one of the world's highest percentages of college-educated citizens: 54 percent of those 25 years or older have had "some college or more," 28 percent have bachelor's degrees, and 10 percent have advanced degrees. The large number of educated people in the United States drives strong demand for high-quality books, magazines, and travel, and creates a high supply of skills.

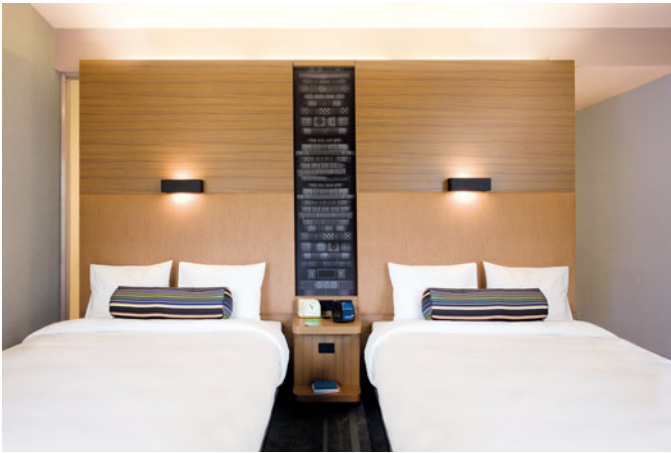
HOUSEHOLD PATTERNS The traditional household consists of a husband, wife, and children (and sometimes grandparents). Yet by 2010, only one in five U.S. households will consist of a married couple with children under 18. Other households are single live-alones (27 percent), single-parent families (8 percent), childless married couples and empty nesters (32 percent), living with nonrelatives only (5 percent), and other family structures (8 percent).³⁵

More people are divorcing or separating, choosing not to marry, marrying later, or marrying without intending to have children. Each group has distinctive needs and buying habits. The single, separated, widowed, and divorced may need smaller apartments; inexpensive and smaller appliances, furniture, and furnishings; and smaller-size food packages.³⁶

Nontraditional households are growing more rapidly than traditional households. Academics and marketing experts estimate that the gay and lesbian population ranges between 4 percent and 8 percent of the total U.S. population, higher in urban areas.³⁷ Even so-called traditional households have experienced change. Boomer dads marry later than their fathers or grandfathers did, shop more, and are much more active in raising their kids. To appeal to them, the maker of the high-concept Bugaboo stroller designed a model with a sleek look and dirt bike-style tires. Dyson, the high-end vacuum company, is appealing to dads' inner geek by focusing on the machine's revolutionary technology. Before Dyson entered the U.S. market, men weren't even on the radar for vacuum cleaner sales. Now they make up 40 percent of Dyson's customers.³⁸

The Economic Environment

The available purchasing power in an economy depends on current income, prices, savings, debt, and credit availability. As the recent economic downturn vividly demonstrated, trends affecting purchasing power can have a strong impact on business, especially for companies whose products are geared to high-income and price-sensitive consumers.



Starwood's Aloft hotel chain blends urban chic with affordable prices.

CONSUMER PSYCHOLOGY Did new consumer spending patterns during the 2008–2009 recession reflect short-term, temporary adjustments or long-term, permanent changes?³⁹ Some experts believed the recession had fundamentally shaken consumers' faith in the economy and their personal financial situations. "Mindless" spending would be out; willingness to comparison shop, haggle, and use discounts would become the norm. Others maintained tighter spending reflected a mere economic constraint and not a fundamental behavioral change. Thus, consumers' aspirations would stay the same, and spending would resume when the economy improves.

Identifying the more likely long-term scenario—especially with the coveted 18- to 34-year-old age group—would help to direct how marketers spend their money. After six months of research and development in the baby boomer market, Starwood launched a "style at a steal" initiative to offer affordable but stylish hotel alternatives to its high-end W, Sheraton, and Westin chains. Targeting an audi-

ence seeking both thrift and luxury, it introduced two new low-cost chains: Aloft, designed to reflect the urban cool of loft apartments, and Element, suites with every "element" of modern daily lives, including healthy food choices and spa-like bathrooms.⁴⁰

INCOME DISTRIBUTION There are four types of industrial structures: *subsistence economies* like Papua New Guinea, with few opportunities for marketers; *raw-material-exporting economies* like Democratic Republic of Congo (copper) and Saudi Arabia (oil), with good markets for equipment, tools, supplies, and luxury goods for the rich; *industrializing economies* like India, Egypt, and the Philippines, where a new rich class and a growing middle class demand new types of goods; and *industrial economies* like Western Europe, with rich markets for all sorts of goods.

Marketers often distinguish countries using five income-distribution patterns: (1) very low incomes; (2) mostly low incomes; (3) very low, very high incomes; (4) low, medium, high incomes; and (5) mostly medium incomes. Consider the market for the Lamborghini, an automobile costing more than \$150,000. The market would be very small in countries with type 1 or 2 income patterns. One of the largest single markets for Lamborghinis is Portugal (income pattern 3)—one of the poorer countries in Western Europe, but with enough wealthy families to afford expensive cars.

INCOME, SAVINGS, DEBT, AND CREDIT Consumer expenditures are affected by income levels, savings rates, debt practices, and credit availability. U.S. consumers have a high debt-to-income ratio, which slows expenditures on housing and large-ticket items. When credit became scarcer in the recession, especially to lower-income borrowers, consumer borrowing dropped for the first time in two decades. The financial meltdown that led to this contraction was due to overly liberal credit policies that allowed consumers to buy homes and other items they could really not afford. Marketers wanted every possible sale, banks wanted to earn interest on loans, and near financial ruin resulted.

An economic issue of increasing importance is the migration of manufacturers and service jobs offshore. From India, Infosys provides outsourcing services for Cisco, Nordstrom, Microsoft, and others. The 25,000 employees the fast-growing \$4 billion company hires every year receive technical, team, and communication training in Infosys's \$120 million facility outside Bangalore.⁴¹

The Sociocultural Environment

From our sociocultural environment we absorb, almost unconsciously, a world view that defines our relationships to ourselves, others, organizations, society, nature, and the universe.

- **Views of ourselves.** In the United States during the 1960s and 1970s, "pleasure seekers" sought fun, change, and escape. Others sought "self-realization." Today, some are adopting more conservative behaviors and ambitions (see Table 3.4 for favorite consumer leisure-time activities and how they have changed, or not, in recent years).
- **Views of others.** People are concerned about the homeless, crime and victims, and other social problems. At the same time, they seek those like themselves for long-lasting relationships, suggesting a growing market for social-support products and services such as health clubs, cruises, and religious activity as well as "social surrogates" like television, video games, and social networking sites.

TABLE 3.4 Favorite Leisure-Time Activities

	1995	2008
	%	%
Reading	28	30
TV watching	25	24
Spending time with family/kids	12	20
Going to movies	8	8
Fishing	10	7
Computer activities	2	7
Gardening	9	5
Renting movies	5	5
Walking	8	6
Exercise (aerobics, weights)	2	8

Source: Harris Interactive, "Spontaneous, Unaided Responses to: 'What Are Your Two or Three Most Favorite Leisure-Time Activities?'" http://www.harrisinteractive.com/harris_poll/index.asp?PID=980. Base: All Adults.

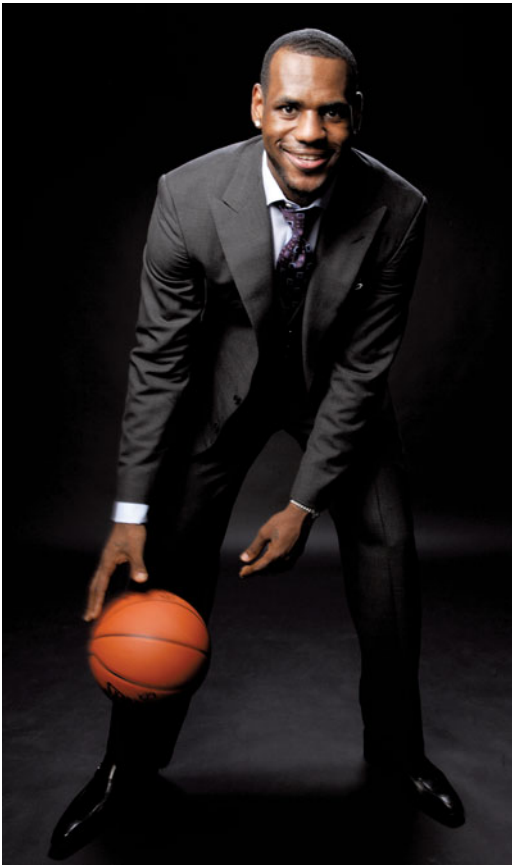
- **Views of organizations.** After a wave of layoffs and corporate scandals, organizational loyalty has declined.⁴² Companies need new ways to win back consumer and employee confidence. They need to ensure they are good corporate citizens and that their consumer messages are honest.⁴³
- **Views of society.** Some people defend society (preservers), some run it (makers), some take what they can from it (takers), some want to change it (changers), some are looking for something deeper (seekers), and still others want to leave it (escapers).⁴⁴ Consumption patterns often reflect these social attitudes. Makers are high achievers who eat, dress, and live well. Changers usually live more frugally, drive smaller cars, and wear simpler clothes. Escapers and seekers are a major market for movies, music, surfing, and camping.
- **Views of nature.** Business has responded to increased awareness of nature's fragility and finiteness by producing wider varieties of camping, hiking, boating, and fishing gear such as boots, tents, backpacks, and accessories.
- **Views of the universe.** Most U.S. citizens are monotheistic, although religious conviction and practice have waned through the years or been redirected into an interest in evangelical movements or Eastern religions, mysticism, the occult, and the human potential movement.

Other cultural characteristics of interest to marketers are the high persistence of core cultural values and the existence of subcultures. Let's look at both.

HIGH PERSISTENCE OF CORE CULTURAL VALUES Most people in the United States still believe in working, getting married, giving to charity, and being honest. *Core beliefs* and values are passed from parents to children and reinforced by social institutions—schools, churches, businesses, and governments. *Secondary beliefs* and values are more open to change. Believing in the institution of marriage is a core belief; believing people should marry early is a secondary belief.

Marketers have some chance of changing secondary values, but little chance of changing core values. The nonprofit organization Mothers Against Drunk Drivers (MADD) does not try to stop the sale of alcohol but promotes lower legal blood-alcohol levels for driving and limited operating hours for businesses that sell alcohol.

Although core values are fairly persistent, cultural swings do take place. In the 1960s, hippies, the Beatles, Elvis Presley, and other cultural phenomena had a major impact on hairstyles, clothing, sexual norms, and life goals. Today's young people are influenced by new heroes and activities: the alternative rock band Green Day, the NBA's LeBron James, and snowboarder and skateboarder Shaun White.



Young people may be influenced by a diverse range of heroes, from basketball player LeBron James to punk-rock band Green Day.

EXISTENCE OF SUBCULTURES Each society contains **subcultures**, groups with shared values, beliefs, preferences, and behaviors emerging from their special life experiences or circumstances. Marketers have always loved teenagers because they are trendsetters in fashion, music, entertainment, ideas, and attitudes. Attract someone as a teen, and you will likely keep the person as a customer later in life. Frito-Lay, which draws 15 percent of its sales from teens, noted a rise in chip snacking by grown-ups. “We think it’s because we brought them in as teenagers,” said Frito-Lay’s marketing director.⁴⁵

The Natural Environment

In Western Europe, “green” parties have pressed for public action to reduce industrial pollution. In the United States, experts have documented ecological deterioration, and watchdog groups such as the Sierra Club and Friends of the Earth carry these concerns into political and social action.

Environmental regulations hit certain industries hard. Steel companies and public utilities have invested billions of dollars in pollution-control equipment and environmentally friendly fuels, making hybrid cars, low-flow toilets and showers, organic foods, and green office buildings everyday realities. Opportunities await those who can reconcile prosperity with environmental protection. Consider these solutions to concerns about air quality:⁴⁶

- Nearly a quarter of the carbon dioxide that makes up about 80 percent of all greenhouse gases comes from electrical power plants. Dublin-based Airtricity operates wind farms in the United States and the United Kingdom that offer cheaper and greener electricity.
- Transportation is second only to electricity generation as a contributor to global warming, accounting for roughly a fifth of carbon emissions. Vancouver-based Westport Innovations developed a conversion technology—high-pressure direct injection—that allows diesel engines to run on cleaner-burning liquid natural gas, reducing greenhouse emissions by a fourth.



Actor and environmental activist Ed Begley Jr. examines a solar oven.

- Due to millions of rural cooking fires, parts of Southern Asia suffer extremely poor air quality. A person cooking over an open wood or kerosene fire inhales the equivalent of two packs of cigarettes a day. Illinois-based Sun Ovens International makes family-sized and institutional solar ovens that use mirrors to redirect the sun's rays into an insulated box. Used in 130 countries, the oven both saves money and reduces greenhouse gas emissions.

Corporate environmentalism recognizes the need to integrate environmental issues into the firm's strategic plans. Trends in the natural environment for marketers to be aware of include the shortage of raw materials, especially water; the increased cost of energy; increased pollution levels; and the changing role of governments. (See also "Marketing Insight: The Green Marketing Revolution.")⁴⁷

- The earth's raw materials consist of the infinite, the finite renewable, and the finite nonrenewable. Firms whose products require *finite nonrenewable resources*—oil, coal, platinum, zinc, silver—face substantial cost increases as depletion approaches. Firms that can develop substitute materials have an excellent opportunity.
- One finite nonrenewable resource, oil, has created serious problems for the world economy. As oil prices soar, companies search for practical means to harness solar, nuclear, wind, and other alternative energies.
- Some industrial activity will inevitably damage the natural environment, creating a large market for pollution-control solutions such as scrubbers, recycling centers, and landfill systems as well as for alternative ways to produce and package goods.
- Many poor nations are doing little about pollution, lacking the funds or the political will. It is in the richer nations' interest to help them control their pollution, but even richer nations today lack the necessary funds.

The Technological Environment

It is the essence of market capitalism to be dynamic and tolerate the creative destructiveness of technology as the price of progress. Transistors hurt the vacuum-tube industry, and autos hurt the railroads. Television hurt the newspapers, and the Internet hurt them both.

When old industries fight or ignore new technologies, their businesses decline. Tower Records had ample warning that its music retail business would be hurt by Internet downloads of music (as well as the growing number of discount music retailers). Its failure to respond led to the liquidation of all its domestic physical stores in 2006.



The Green Marketing Revolution

Consumers' environmental concerns are real. Gallup polls reveal the percentage of U.S. adults who believe global warming will pose a serious threat during their lifetime has increased from 25 percent in 1998 to 40 percent in 2008. A Mediamark Research & Intelligence study in 2008 found that almost two-thirds of U.S. men and women stated that "preserving the environment as a guiding principle in your life" was "very important." A *Washington Post*/ABC News/Stanford University poll in 2007 found that 94 percent of respondents were "willing" to "personally change some of the things you do in order to improve the environment," with 50 percent saying they were "very willing."

Converting this concern into concerted consumer action on the environment, however, will be a longer-term process. A 2008 TNS survey found that only 26 percent of Americans said they were "actively seeking environmentally friendly products." A 2008 Gallup poll found that only 28 percent of respondents claimed to have made "major changes" in their own shopping and living habits over the past five years to protect the environment. Other research reported that consumers were more concerned with closer to home environmental issues such as water pollution in rivers and lakes than broader issues such as global warming. As is often the case, behavioral change is following attitudinal change for consumers.

Nevertheless, as research by GfK Roper Consulting shows, consumer expectations as to corporate behavior with the environment have significantly changed, and in many cases these expectations are higher than the demands they place on themselves. Consumers vary, however, in their environmental sensitivity and can be categorized into five groups based on their degree of commitment (see ▲ Figure 3.1). Interestingly, although some marketers assume that younger people are more concerned about the environment than older consumers, some research suggests that older consumers actually take their eco-responsibilities more seriously.

In the past, the "green marketing" programs launched by companies around specific products were not always entirely successful for several possible reasons. Consumers might have thought that the product was inferior because it was green, or that it was not even really green to begin with. Those green products that were successful, however, persuaded consumers that they were acting in their own and society's long-run interest at the same time. Some examples were organic foods that were seen as healthier, tastier, and safer, and energy-efficient appliances that were seen as costing less to run.

There are some expert recommendations as to how to avoid "green marketing myopia" by focusing on consumer value positioning, calibration of consumer knowledge, and the credibility of product claims. One challenge with green marketing is the difficulty consumers have in understanding the environmental benefits of products, leading to many accusations of "greenwashing" where products are not nearly as green and environmentally beneficial as their marketing might suggest.

Although there have been green products emphasizing their natural benefits for years—Tom's of Maine, Burt's Bees, Stonyfield Farm, and Seventh Generation to name just a few—products offering environmental benefits are becoming more mainstream. Part of the success of Clorox Green Works cleaning products and household cleaning products, launched in January 2008, was that it found the sweet spot of a target market wanting to take smaller steps toward a greener lifestyle

|Fig. 3.1| ▲

Consumer Environmental Segments

Source: GfK Roper Green Gauge® 2007, GfK Roper Consulting, New York, NY.

- *Genuine Greens* (15%): This segment is the most likely to think and act green. Some may be true environmental activists, but most probably fall more under the category of strong advocates. This group sees few barriers to behaving green and may be open to partnering with marketers on environmental initiatives.
- *Not Me Greens* (18%): This segment expresses very pro-green attitudes, but its behaviors are only moderate, perhaps because these people perceive lots of barriers to living green. There may be a sense among this group that the issue is too big for them to handle, and they may need encouragement to take action.
- *Go-with-the-Flow Greens* (17%): This group engages in some green behaviors—mostly the "easy" ones such as recycling. But being green is not a priority for them, and they seem to take the path of least resistance. This group may only take action when it's convenient for them.
- *Dream Greens* (13%): This segment cares a great deal about the environment, but doesn't seem to have the knowledge or resources to take action. This group may offer the greatest opportunity to act green if given the chance.
- *Business First Greens* (23%): This segment's perspective is that the environment is not a huge concern and that business and industry is doing its part to help. This may explain why they don't feel the need to take action themselves—even as they cite lots of barriers to doing so.
- *Mean Greens* (13%): This group claims to be knowledgeable about environmental issues, but does not express pro-green attitudes or behaviors. Indeed, it is practically hostile toward pro-environmental ideas. This segment has chosen to reject prevailing notions about environmental protection and may even be viewed as a potential threat to green initiatives.

and matched that with a green product with a very modest price premium and sold through a grassroots marketing program.

Environmental concerns are affecting how virtually every major company does their business: Walt Disney Corp. has pledged to reduce its solid waste by 2013, conserve millions of gallons of water, invest in renewable energy, and become completely carbon neutral (reaching 50 percent of that goal by 2012); Best Buy has expanded its recycling program for electronics; Caterpillar announced plans to reduce the GHG emissions of its entire product line by 20 percent by 2020; and Whole Foods, a leader among national supermarket chains in selling certified “organic food” already, cofounded a partnership to reduce emissions from grocery refrigerators and offsets 100 percent of its electricity use with renewable energy via wind-energy credits.

Toyota, HP, IKEA, Procter & Gamble, and Walmart have all been linked to high-profile environmental and sustainability programs. Some other marketers, fearing harsh scrutiny or unrealistic expectations, keep a lower profile. Even though Nike uses recycled sneakers in its soles of new shoes, they chose not to publicize that fact so that they can keep their focus on performance and winning. The rules of the game in green marketing are changing rapidly as both consumers and companies respond to problems and proposed solutions to the significant environmental problems that exist.

Sources: Jerry Adler, “Going Green,” *Newsweek*, July 17, 2006, pp. 43–52; Jacquelyn A. Ottman, Edwin R. Stafford, and Cathy L. Hartman, “Avoiding Green Marketing Myopia,” *Environment* (June 2006): 22–36; Jill Meredith Ginsberg and Paul N. Bloom, “Choosing the Right Green Marketing Strategy,” *MIT Sloan Management Review* (Fall 2004): 79–84; Jacquelyn Ottman, *Green Marketing: Opportunity for Innovation*, 2nd ed. (New York: BookSurge Publishing, 2004); Mark Dolliver, “Deflating a Myth,” *Brandweek*, May 12, 2008, pp. 30–31; “Winner: Corporate Sustainability, Walt Disney Worldwide,” *Travel and Leisure*, November 2009, p. 106; “The Greenest Big Companies in America,” *Newsweek*, September 28, 2009, pp. 34–53; Sarah Mahoney, “Best Buy Connects Green with Thrift,” *Media Post News: Marketing Daily*, January 28, 2009; Reena Jana, “Nike Quietly Goes Green,” *BusinessWeek*, June 11, 2009.



Clorox's Green Works has been a huge market hit by combining environmental benefits with affordability.

Major new technologies stimulate the economy's growth rate. Unfortunately, between innovations, an economy can stagnate. Minor innovations fill the gap—new supermarket products such as frozen waffles, body washes, and energy bars might pop up—but while lower risk, they can also divert research effort away from major breakthroughs.

Innovation's long-run consequences are not always foreseeable. The contraceptive pill reduced family size and thus increased discretionary incomes, also raising spending on vacation travel, durable goods, and luxury items. Cell phones, video games, and the Internet are reducing attention to traditional media, as well as face-to-face social interaction as people listen to music or watch a movie on their cell phones.

Marketers should monitor the following technology trends: the accelerating pace of change, unlimited opportunities for innovation, varying R&D budgets, and increased regulation of technological change.

ACCELERATING PACE OF CHANGE More ideas than ever are in the works, and the time between idea and implementation is shrinking. So is the time between introduction and peak production. Apple ramped up in seven years to sell a staggering 220 million iPods worldwide by September 2009.

UNLIMITED OPPORTUNITIES FOR INNOVATION Some of the most exciting work today is taking place in biotechnology, computers, microelectronics, telecommunications, robotics, and designer materials. Researchers are working on AIDS vaccines, safer contraceptives, and nonfattening foods. They are developing new classes of antibiotics to fight ultra-resistant infections, superheating furnaces to reduce trash to raw materials, and building miniature water-treatment plants for remote locations.⁴⁸



Text messaging is profoundly changing how consumers choose to communicate.

VARYING R&D BUDGETS A growing portion of U.S. R&D expenditures goes to the development as opposed to the research side, raising concerns about whether the United States can maintain its lead in basic science. Many companies put their money into copying competitors' products and making minor feature and style improvements. Even basic research companies such as Dow Chemical, Bell Laboratories, and Pfizer are proceeding cautiously, and more consortiums than single companies are directing research efforts toward major breakthroughs.

INCREASED REGULATION OF TECHNOLOGICAL CHANGE

Government has expanded its agencies' powers to investigate and ban potentially unsafe products. In the United States, the Food and Drug Administration (FDA) must approve all drugs before they can be sold. Safety and health regulations have increased for food, automobiles, clothing, electrical appliances, and construction.

The Political-Legal Environment

The political and legal environment consists of laws, government agencies, and pressure groups that influence various organizations and individuals. Sometimes these laws create new business opportunities. Mandatory recycling laws have boosted the recycling industry and launched dozens of new companies making new products from recycled materials. Two major trends are the increase in business legislation and the growth of special-interest groups.

INCREASE IN BUSINESS LEGISLATION Business legislation is intended to protect companies from unfair competition, protect consumers from unfair business practices, protect society from unbridled business behavior, and charge businesses with the social costs of their products or production processes. Each new law may also have the unintended effect of sapping initiative and slowing growth.

The European Commission has established new laws covering competitive behavior, product standards, product liability, and commercial transactions for the 27 member nations of the European Union. The United States has many consumer protection laws covering competition, product safety and liability, fair trade and credit practices, and packaging and labeling, but many countries' laws are stronger.⁴⁹ Norway bans several forms of sales promotion—trading stamps, contests, and premiums—as inappropriate or unfair. Thailand requires food processors selling national brands to market low-price brands also, so low-income consumers can find economy brands. In India, food companies need special approval to launch duplicate brands, such as another cola drink or brand of rice. As more transactions take place in cyberspace, marketers must establish new ways to do business ethically.

GROWTH OF SPECIAL-INTEREST GROUPS Political action committees (PACs) lobby government officials and pressure business executives to respect the rights of consumers, women, senior citizens, minorities, and gays and lesbians. Insurance companies directly or indirectly affect the design of smoke detectors; scientific groups affect the design of spray products. Many companies have established public affairs departments to deal with these groups and issues. The **consumerist movement** organized citizens and government to strengthen the rights and powers of buyers in relationship to sellers. Consumerists have won the right to know the real cost of a loan, the true cost per standard unit of competing brands (unit pricing), the basic ingredients and true benefits of a product, and the nutritional quality and freshness of food.

Privacy issues and identity theft will remain public policy hot buttons as long as consumers are willing to swap personal information for customized products—from marketers they trust.⁵⁰ Consumers worry they will be robbed or cheated; that private information will be used against them; that they will be bombarded by solicitations; and that children will be targeted.⁵¹ Wise companies establish consumer affairs departments to formulate policies and resolve complaints.

Forecasting and Demand Measurement

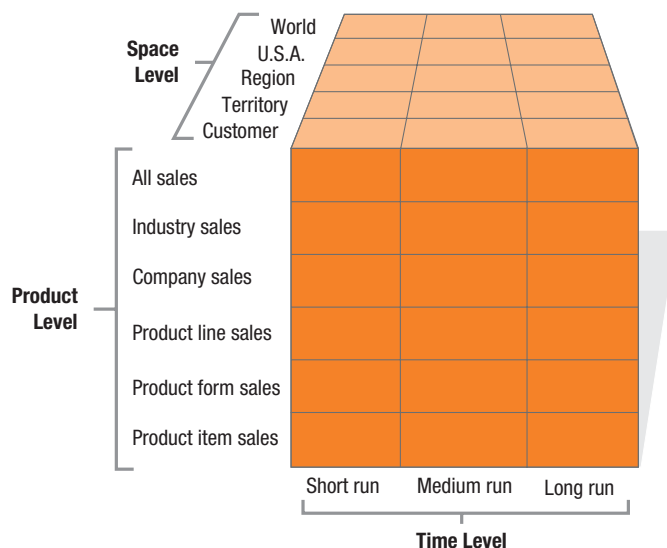
Understanding the marketing environment and conducting marketing research (described in Chapter 4) can help to identify marketing opportunities. The company must then measure and forecast the size, growth, and profit potential of each new opportunity. Sales forecasts prepared by marketing are used by finance to raise cash for investment and operations; by manufacturing to establish capacity and output; by purchasing to acquire the right amount of supplies; and by human resources to hire the needed workers. If the forecast is off the mark, the company will face excess or inadequate inventory. Since it's based on estimates of demand, managers need to define what they mean by market demand. Although DuPont's Performance Materials group knows DuPont Tyvek has 70 percent of the \$100 million market for air-barrier membranes, they see greater opportunity with more products and services to tap into the entire \$7 billion U.S. home construction market.⁵²

The Measures of Market Demand

Companies can prepare as many as 90 different types of demand estimates for six different product levels, five space levels, and three time periods (see ▲ Figure 3.2). Each demand measure serves a specific purpose. A company might forecast short-run demand to order raw materials, plan production, and borrow cash. It might forecast regional demand to decide whether to set up regional distribution.

There are many productive ways to break down the market:

- The **potential market** is the set of consumers with a sufficient level of interest in a market offer. However, their interest is not enough to define a market unless they also have sufficient income and access to the product.
- The **available market** is the set of consumers who have interest, income, *and* access to a particular offer. The company or government may restrict sales to certain groups; a particular state might ban motorcycle sales to anyone under 21 years of age. Eligible adults constitute the *qualified available market*—the set of consumers who have interest, income, access, and qualifications for the market offer.
- The **target market** is the part of the qualified available market the company decides to pursue. The company might concentrate its marketing and distribution effort on the East Coast.
- The **penetrated market** is the set of consumers who are buying the company's product.



[Fig. 3.2] ▲


Ninety Types of
Demand Measurement
(6 × 5 × 3)

These definitions are a useful tool for market planning. If the company isn't satisfied with its current sales, it can try to attract a larger percentage of buyers from its target market. It can lower the qualifications for potential buyers. It can expand its available market by opening distribution elsewhere or lowering its price, or it can reposition itself in the minds of its customers.

A Vocabulary for Demand Measurement

The major concepts in demand measurement are market demand and company demand. Within each, we distinguish among a demand function, a sales forecast, and a potential.

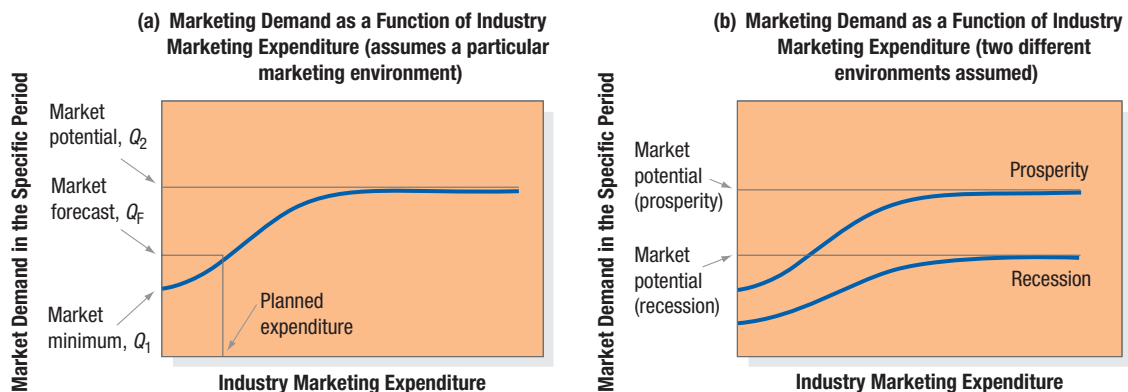
MARKET DEMAND The marketer's first step in evaluating marketing opportunities is to estimate total market demand. **Market demand** for a product is the total volume that would be bought by a defined customer group in a defined geographical area in a defined time period in a defined marketing environment under a defined marketing program.

Market demand is not a fixed number, but rather a function of the stated conditions. For this reason, we call it the *market demand function*. Its dependence on underlying conditions is illustrated in  Figure 3.3(a). The horizontal axis shows different possible levels of industry marketing expenditure in a given time period. The vertical axis shows the resulting demand level. The curve represents the estimated market demand associated with varying levels of marketing expenditure.

Some base sales—called the *market minimum* and labeled Q_1 in the figure—would take place without any demand-stimulating expenditures. Higher marketing expenditures would yield higher levels of demand, first at an increasing rate, then at a decreasing rate. Take fruit juices. Given the indirect competition they face from other types of beverages, we would expect increased marketing expenditures to help fruit juice products stand out and increase demand and sales. Marketing expenditures beyond a certain level would not stimulate much further demand, suggesting an upper limit called the *market potential* and labeled Q_2 in the figure.

The distance between the market minimum and the market potential shows the overall *marketing sensitivity of demand*. We can think of two extreme types of markets, the expansible and the nonexpansible. An *expansible market*, such as the market for racquetball playing, is very much affected in size by the level of industry marketing expenditures. In terms of Figure 3.3(a), the distance between Q_1 and Q_2 is relatively large. A *nonexpansible market*—for example, the market for weekly trash or garbage removal—is *not* much affected by the level of marketing expenditures; the distance between Q_1 and Q_2 is relatively small. Organizations selling in a nonexpansible market must accept the market's size—the level of *primary demand* for the product class—and direct their efforts toward winning a larger **market share** for their product, that is, a higher level of selective demand for their product.

It pays to compare the current and potential levels of market demand. The result is the **market-penetration index**. A low index indicates substantial growth potential for all the firms. A high index suggests it will be expensive to attract the few remaining prospects. Generally, price competition increases and margins fall when the market-penetration index is already high.




[Fig. 3.3]  Market Demand Functions

Comparing current and potential market shares yields a firm's **share-penetration index**. If this index is low, the company can greatly expand its share. Holding it back could be low brand awareness, low availability, benefit deficiencies, or high price. A firm should calculate the share-penetration increases from removing each factor, to see which investments produce the greatest improvement.⁵³

Remember the market demand function is not a picture of market demand over time. Rather, it shows alternative current forecasts of market demand associated with possible levels of industry marketing effort.

MARKET FORECAST Only one level of industry marketing expenditure will actually occur. The market demand corresponding to this level is called the **market forecast**.

MARKET POTENTIAL The market forecast shows *expected* market demand, not maximum market demand. For the latter, we need to visualize the level of market demand resulting from a very high level of industry marketing expenditure, where further increases in marketing effort would have little effect. **Market potential** is the limit approached by market demand as industry marketing expenditures approach infinity for a given marketing environment.

The phrase "for a given market environment" is crucial. Consider the market potential for automobiles. It's higher during prosperity than during a recession. The dependence of market potential on the environment is illustrated in  Figure 3.3(b). Market analysts distinguish between the position of the market demand function and movement along it. Companies cannot do anything about the position of the market demand function, which is determined by the marketing environment. However, they influence their particular location on the function when they decide how much to spend on marketing.

Companies interested in market potential have a special interest in the **product-penetration percentage**, the percentage of ownership or use of a product or service in a population. Companies assume that the lower the product-penetration percentage, the higher the market potential, although this also assumes everyone will eventually be in the market for every product.

COMPANY DEMAND **Company demand** is the company's estimated share of market demand at alternative levels of company marketing effort in a given time period. It depends on how the company's products, services, prices, and communications are perceived relative to the competitors'. Other things equal, the company's market share depends on the relative scale and effectiveness of its market expenditures. Marketing model builders have developed sales response functions to measure how a company's sales are affected by its marketing expenditure level, marketing mix, and marketing effectiveness.⁵⁴

COMPANY SALES FORECAST Once marketers have estimated company demand, their next task is to choose a level of marketing effort. The **company sales forecast** is the expected level of company sales based on a chosen marketing plan and an assumed marketing environment.

We represent the company sales forecast graphically with sales on the vertical axis and marketing effort on the horizontal axis, as in Figure 3.3. We often hear that the company should develop its marketing plan on the basis of its sales forecast. This forecast-to-plan sequence is valid if *forecast* means an estimate of national economic activity, or if company demand is nonexpansible. The sequence is not valid, however, where market demand is expansible or where *forecast* means an estimate of company sales. The company sales forecast does not establish a basis for deciding what to spend on marketing. On the contrary, the sales forecast is the result of an assumed marketing expenditure plan.

Two other concepts are important here. A **sales quota** is the sales goal set for a product line, company division, or sales representative. It is primarily a managerial device for defining and stimulating sales effort, often set slightly higher than estimated sales to stretch the sales force's effort.

A **sales budget** is a conservative estimate of the expected volume of sales, primarily for making current purchasing, production, and cash flow decisions. It's based on the need to avoid excessive risk and is generally set slightly lower than the sales forecast.

COMPANY SALES POTENTIAL **Company sales potential** is the sales limit approached by company demand as company marketing effort increases relative to that of competitors. The absolute limit of company demand is, of course, the market potential. The two would be equal if the company got 100 percent of the market. In most cases, company sales potential is less than the

market potential, even when company marketing expenditures increase considerably. Each competitor has a hard core of loyal buyers unresponsive to other companies’ efforts to woo them.

Estimating Current Demand

We are now ready to examine practical methods for estimating current market demand. Marketing executives want to estimate total market potential, area market potential, and total industry sales and market shares.

TOTAL MARKET POTENTIAL **Total market potential** is the maximum sales available to all firms in an industry during a given period, under a given level of industry marketing effort and environmental conditions. A common way to estimate total market potential is to multiply the potential number of buyers by the average quantity each purchases, times the price.

If 100 million people buy books each year, and the average book buyer buys three books a year at an average price of \$20 each, then the total market potential for books is \$6 billion (100 million × 3 × \$20). The most difficult component to estimate is the number of buyers. We can always start with the total population in the nation, say, 261 million people. Next we eliminate groups that obviously would not buy the product. Assume illiterate people and children under 12 don’t buy books and constitute 20 percent of the population. This means 80 percent of the population, or 209 million people, are in the potentials pool. Further research might tell us that people of low income and low education don’t buy books, and they constitute over 30 percent of the potentials pool. Eliminating them, we arrive at a prospect pool of approximately 146.3 million book buyers. We use this number to calculate total market potential.

A variation on this method is the *chain-ratio method*, which multiplies a base number by several adjusting percentages. Suppose a brewery is interested in estimating the market potential for a new light beer especially designed to accompany food. It can make an estimate with the following calculation:

Demand for the new light beer	×	Population	×	Average percentage of personal discretionary income per capita spent on food	×	Average percentage of amount spent on food that is spent on beverages	×	Average percentage of amount spent on beverages that is spent on alcoholic beverages	×	Average percentage of amount spent on alcoholic beverages that is spent on beer	×	Expected percentage of amount spent on beer that will be spent on light beer
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AREA MARKET POTENTIAL Because companies must allocate their marketing budget optimally among their best territories, they need to estimate the market potential of different cities, states, and nations. Two major methods are the market-buildup method, used primarily by business marketers, and the multiple-factor index method, used primarily by consumer marketers.

Market-Buildup Method The **market-buildup method** calls for identifying all the potential buyers in each market and estimating their potential purchases. It produces accurate results if we have a list of all potential buyers and a good estimate of what each will buy. Unfortunately, this information is not always easy to gather.

Consider a machine-tool company that wants to estimate the area market potential for its wood lathe in the Boston area. Its first step is to identify all potential buyers of wood lathes in the area, primarily manufacturing establishments that shape or ream wood as part of their operations. The company could compile a list from a directory of all manufacturing establishments in the area. Then it could estimate the number of lathes each industry might purchase, based on the number of lathes per thousand employees or per \$1 million of sales in that industry.

An efficient method of estimating area market potentials makes use of the *North American Industry Classification System (NAICS)*, developed by the U.S. Bureau of the Census in conjunction with the Canadian and Mexican governments.⁵⁵ The NAICS classifies all manufacturing into 20 major industry sectors and further breaks each sector into a six-digit, hierarchical structure as follows.

51	Industry sector (information)
513	Industry subsector (broadcasting and telecommunications)
5133	Industry group (telecommunications)
51332	Industry (wireless telecommunications carriers, except satellite)
513321	National industry (U.S. paging)

For each six-digit NAICS number, a company can purchase CD-ROMs of business directories that provide complete company profiles of millions of establishments, subclassified by location, number of employees, annual sales, and net worth.

To use the NAICS, the lathe manufacturer must first determine the six-digit NAICS codes that represent products whose manufacturers are likely to require lathe machines. To get a full picture of all six-digit NAICS industries that might use lathes, the company can (1) determine past customers' NAICS codes; (2) go through the NAICS manual and check off all the six-digit industries that might have an interest in lathes; (3) mail questionnaires to a wide range of companies inquiring about their interest in wood lathes.

The company's next task is to determine an appropriate base for estimating the number of lathes each industry will use. Suppose customer industry sales are the most appropriate base. Once the company estimates the rate of lathe ownership relative to the customer industry's sales, it can compute the market potential.

Multiple-Factor Index Method Like business marketers, consumer companies also need to estimate area market potentials, but since their customers are too numerous to list they commonly use a straightforward index. A drug manufacturer might assume the market potential for drugs is directly related to population size. If the state of Virginia has 2.55 percent of the U.S. population, Virginia might be a market for 2.55 percent of total drugs sold.

A single factor is rarely a complete indicator of sales opportunity. Regional drug sales are also influenced by per capita income and the number of physicians per 10,000 people. Thus, it makes sense to develop a multiple-factor index and assign each factor a specific weight. Suppose Virginia has 2.00 percent of U.S. disposable personal income, 1.96 percent of U.S. retail sales, and 2.28 percent of U.S. population, and the respective weights are 0.5, 0.3, and 0.2. The buying-power index for Virginia is then 2.04 [$0.5(2.00) + 0.3(1.96) + 0.2(2.28)$]. Thus 2.04 percent of the nation's drug sales (not 2.28 percent) might be expected to take place in Virginia.

The weights in the buying-power index are somewhat arbitrary, and companies can assign others if appropriate. A manufacturer might adjust the market potential for additional factors, such as competitors' presence, local promotional costs, seasonal factors, and market idiosyncrasies.

Many companies compute area indexes to allocate marketing resources. Suppose the drug company is reviewing the six cities listed in Table 3.5. The first two columns show its percentage of U.S. brand and category sales in these six cities. Column 3 shows the **brand development index (BDI)**, the index of brand sales to category sales. Seattle has a BDI of 114 because the brand is

TABLE 3.5 Calculating the Brand Development Index (BDI)

	(a) Percent of U.S. Brand	(b) Percent of U.S. Category	BDI
Territory	Sales	Sales	$(a \div b) \times 100$
Seattle	3.09	2.71	114
Portland	6.74	10.41	65
Boston	3.49	3.85	91
Toledo	.97	.81	120
Chicago	1.13	.81	140
Baltimore	3.12	3.00	104

relatively more developed than the category in Seattle. Portland's BDI is 65, which means the brand is relatively underdeveloped there.

Normally, the lower the BDI, the higher the market opportunity, in that there is room to grow the brand. Other marketers would argue instead that marketing funds should go into the brand's *strongest* markets, where it might be important to reinforce loyalty or more easily capture additional brand share. Investment decisions should be based on the potential to grow brand sales. Feeling it was underperforming in a high-potential market, Anheuser-Busch targeted the growing Hispanic population in Texas with a number of special marketing activities. Cross-promotions with Budweiser and Clamato tomato clam cocktail (to mix the popular Michiladas drink), sponsorship of the Esta Noche Toca concert series, and support of Latin music acts with three-on-three soccer tournaments helped drive higher sales.⁵⁶

After the company decides on the city-by-city allocation of its budget, it can refine each city allocation down to census tracts or zip+4 code centers. *Census tracts* are small, locally defined statistical areas in metropolitan areas and some other counties. They generally have stable boundaries and a population of about 4,000. Zip+4 code centers (designed by the U.S. Post Office) are a little larger than neighborhoods. Data on population size, median family income, and other characteristics are available for these geographical units. Using other sources such as loyalty card data, Mediabrands's Geomentum targets "hyper-local" sectors of zip codes, city blocks, or even individual households with ad messages delivered via interactive TV, zoned editions of newspapers, Yellow Pages, outdoor media, and local Internet searches.⁵⁷

INDUSTRY SALES AND MARKET SHARES Besides estimating total potential and area potential, a company needs to know the actual industry sales taking place in its market. This means identifying competitors and estimating their sales.

The industry trade association will often collect and publish total industry sales, although it usually does not list individual company sales separately. With this information, however, each company can evaluate its own performance against the industry's. If a company's sales are increasing by 5 percent a year and industry sales are increasing by 10 percent, the company is losing its relative standing in the industry.

Another way to estimate sales is to buy reports from a marketing research firm that audits total sales and brand sales. Nielsen Media Research audits retail sales in various supermarket and drug-store product categories. A company can purchase this information and compare its performance to the total industry or any competitor to see whether it is gaining or losing share, overall or brand by brand. Because distributors typically will not supply information about how much of competitors' products they are selling, business-to-business marketers operate with less knowledge of their market share results.

Estimating Future Demand

The few products or services that lend themselves to easy forecasting generally enjoy an absolute level or a fairly constant trend, and competition that is either nonexistent (public utilities) or stable (pure oligopolies). In most markets, in contrast, good forecasting is a key factor in success.

Companies commonly prepare a macroeconomic forecast first, followed by an industry forecast, followed by a company sales forecast. The macroeconomic forecast projects inflation, unemployment, interest rates, consumer spending, business investment, government expenditures, net exports, and other variables. The end result is a forecast of gross domestic product (GDP), which the firm uses, along with other environmental indicators, to forecast industry sales. The company derives its sales forecast by assuming it will win a certain market share.

How do firms develop their forecasts? They may create their own or buy forecasts from outside sources such as marketing research firms, which interview customers, distributors, and other knowledgeable parties. Specialized forecasting firms produce long-range forecasts of particular macroenvironmental components, such as population, natural resources, and technology. Examples are IHS Global Insight (a merger of Data Resources and Wharton Econometric Forecasting Associates), Forrester Research, and the Gartner Group. Futurist research firms produce speculative scenarios; three such firms are the Institute for the Future, Hudson Institute, and the Futures Group.

All forecasts are built on one of three information bases: what people say, what people do, or what people have done. Using what people say requires surveying buyers' intentions, composites of sales force opinions, and expert opinion. Building a forecast on what people do means putting the product

into a test market to measure buyer response. To use the final basis—what people have done—firms analyze records of past buying behavior or use time-series analysis or statistical demand analysis.

SURVEY OF BUYERS' INTENTIONS **Forecasting** is the art of anticipating what buyers are likely to do under a given set of conditions. For major consumer durables such as appliances, research organizations conduct periodic surveys of consumer buying intentions, ask questions like *Do you intend to buy an automobile within the next six months?* and put the answers on a **purchase probability scale**:

0.00	0.20	0.40	0.60	0.80	1.00
No	Slight	Fair	Good	High	Certain
chance	possibility	possibility	possibility	possibility	

Surveys also inquire into consumers' present and future personal finances and expectations about the economy. They combine bits of information into a consumer confidence measure (Conference Board) or a consumer sentiment measure (Survey Research Center of the University of Michigan).

For business buying, research firms can carry out buyer-intention surveys for plant, equipment, and materials, usually falling within a 10 percent margin of error. These surveys are useful in estimating demand for industrial products, consumer durables, product purchases where advanced planning is required, and new products. Their value increases to the extent that buyers are few, the cost of reaching them is low, and they have clear intentions they willingly disclose and implement.

COMPOSITE OF SALES FORCE OPINIONS When buyer interviewing is impractical, the company may ask its sales representatives to estimate their future sales. Few companies use these estimates without making some adjustments, however. Sales representatives might be pessimistic or optimistic, they might not know how their company's marketing plans will influence future sales in their territory, and they might deliberately underestimate demand so the company will set a low sales quota. To encourage better estimating, the company could offer incentives or assistance, such as information about marketing plans or past forecasts compared to actual sales.

Sales force forecasts yield a number of benefits. Sales reps might have better insight into developing trends than any other group, and forecasting might give them greater confidence in their sales quotas and more incentive to achieve them. A "grassroots" forecasting procedure provides detailed estimates broken down by product, territory, customer, and sales rep.

EXPERT OPINION Companies can also obtain forecasts from experts, including dealers, distributors, suppliers, marketing consultants, and trade associations. Dealer estimates are subject to the same strengths and weaknesses as sales force estimates. Many companies buy economic and industry forecasts from well-known economic-forecasting firms that have more data available and more forecasting expertise.

Occasionally, companies will invite a group of experts to prepare a forecast. The experts exchange views and produce an estimate as a group (*group-discussion method*) or individually, in which case another analyst might combine them into a single estimate (*pooling of individual estimates*). Further rounds of estimating and refining follow (the Delphi method).⁵⁸

PAST-SALES ANALYSIS Firms can develop sales forecasts on the basis of past sales. *Time-series analysis* breaks past time series into four components (trend, cycle, seasonal, and erratic) and projects them into the future. *Exponential smoothing* projects the next period's sales by combining an average of past sales and the most recent sales, giving more weight to the latter. *Statistical demand analysis* measures the impact of a set of causal factors (such as income, marketing expenditures, and price) on the sales level. Finally, *econometric analysis* builds sets of equations that describe a system and statistically derives the different parameters that make up the equations statistically.

MARKET-TEST METHOD When buyers don't plan their purchases carefully, or experts are unavailable or unreliable, a direct-market test can help forecast new-product sales or established product sales in a new distribution channel or territory. (We discuss market testing in detail in Chapter 20.)