Summary

1. To carry out their analysis, planning, implementation, and control responsibilities, marketing managers need a marketing information system (MIS). The role of the MIS is to assess the managers' information needs, develop the needed information, and distribute that information in a timely manner.

2. An MIS has three components: (a) an internal records system, which includes information on the order-to-payment cycle and sales information systems; (b) a marketing intelligence system, a set of procedures and sources used by managers to obtain everyday information about pertinent developments in the marketing environment; and (c) a marketing research system that allows for the systematic design, collection, analysis, and reporting of data and findings relevant to a specific marketing situation.

3. Marketers find many opportunities by identifying trends (directions or sequences of events that have some momentum and durability) and megatrends (major social, economic, political, and technological changes that have long-lasting influence).

4. Within the rapidly changing global picture, marketers must monitor six major environmental forces: demographic, economic, social-cultural, natural, technological, and political-legal.

5. In the demographic environment, marketers must be aware of worldwide population growth; changing mixes of age, ethnic composition, and educational levels; the rise of nontraditional families; and large geographic shifts in population.

6. In the economic arena, marketers need to focus on income distribution and levels of savings, debt, and credit availability.

7. In the social-cultural arena, marketers must understand people's views of themselves, others, organizations, society, nature, and the universe. They must market products that correspond to society's core and secondary values and address the needs of different subcultures within a society.

8. In the natural environment, marketers need to be aware of the public's increased concern about the health of the environment. Many marketers are now embracing sustainability and green marketing programs that provide better environmental solutions as a result.

9. In the technological arena, marketers should take account of the accelerating pace of technological change, opportunities for innovation, varying R&D budgets, and the increased governmental regulation brought about by technological change.

10. In the political-legal environment, marketers must work within the many laws regulating business practices and with various special-interest groups.

11. There are two types of demand: market demand and company demand. To estimate current demand, companies attempt to determine total market potential, area market potential, industry sales, and market share. To estimate future demand, companies survey buyers' intentions, solicit their sales force's input, gather expert opinions, analyze past sales, or engage in market testing. Mathematical models, advanced statistical techniques, and computerized data collection procedures are essential to all types of demand and sales forecasting.

Applications

Marketing Debate
Is Consumer Behavior More a Function of a Person's Age or Generation?

One of the widely debated issues in developing marketing programs that target certain age groups is how much consumers change over time. Some marketers maintain that age differences are critical and that the needs and wants of a 25-year-old in 2010 are not that different from those of a 25-year-old in 1980. Others argue that cohort and generation effects are critical, and that marketing programs must therefore suit the times.

Take a position: Age differences are fundamentally more important than cohort effects *versus* Cohort effects can dominate age differences.

Marketing Discussion
Age Targeting

What brands and products do you feel successfully "speak to you" and effectively target your age group? Why? Which ones do not? What could they do better?

Marketing Excellence

>>Microsoft

Microsoft is the world's most successful software company. The company was founded by Bill Gates and Paul Allen in 1975 with the original mission of having "a computer on every desk and in every home, running Microsoft software." Since then, Microsoft has grown to become the third most valuable brand in the world through strategic marketing and aggressive growth tactics.

Microsoft's first significant success occurred in the early 1980s with the creation of the DOS operating system for IBM computers. The company used this initial success with IBM to sell software to other manufacturers, quickly making Microsoft a major player in the industry. Initial advertising efforts focused on communicating the company's range of products from DOS to the launch of Excel and Windows—all under a unified "Microsoft" look.

Microsoft went public in 1986 and grew tremendously over the next decade as the Windows operating system and Microsoft Office took off. In 1990, Microsoft launched a completely revamped version of its operating system and named it Windows 3.0. Windows 3.0 offered an improved set of Windows icons and applications like File Manager and Program Manager that are still used today. It was an instant success; Microsoft sold more than 10 million copies of the software within two years—a phenomenon in those days. In addition, Windows 3.0 became the first operating system to be preinstalled on certain PCs, marking a major milestone in the industry and for Microsoft.

Throughout the 1990s, Microsoft's communication efforts convinced businesses that its software was not only the best choice for business but also that it needed to be upgraded frequently. Microsoft spent millions of dollars in magazine advertising and received endorsements from the top computer magazines in the industry, making Microsoft Windows and Office the must-have software of its time. Microsoft successfully launched Windows 95 in 1995 and Windows 98 in 1998, using the slogan, "Where Do You Want to Go Today?" The slogan didn't push individual products but rather the company itself, which could help empower companies and consumers alike.

During the late 1990s, Microsoft entered the notorious "browser wars" as companies struggled to find their place during the Internet boom. In 1995, Netscape launched its Navigator browser over the Internet. Realizing what a good product Netscape had, Microsoft launched the first version of its own browser, Internet Explorer, later that same year. By 1997, Netscape held a 72 percent share and Explorer an 18 percent share. Five years later, however, Netscape's share had fallen to 4 percent.

During those five years, Microsoft took three major steps to overtake the competition. First, it bundled Internet Explorer with its Office product, which included Excel, Word, and PowerPoint. Automatically, consumers who wanted MS Office became Explorer users as well. Second, Microsoft partnered with AOL, which opened the doors to 5 million new consumers almost overnight. And, finally, Microsoft used its deep pockets to ensure that Internet Explorer was available free, essentially "cutting off Netscape's air supply." These efforts, however, were not without controversy. Microsoft faced antitrust charges in 1998 and numerous lawsuits based on its marketing tactics, and some perceived that it was monopolizing the industry.

Charges aside, the company's stock took off, peaking in 1999 at $60 per share. Microsoft released Windows 2000 in 2000 and Windows XP in 2001. It also launched Xbox in 2001, marking the company's entrance into the multibillion-dollar gaming industry.

Over the next several years, Microsoft's stock price dipped by over $40 a share as consumers waited for the next operating system and Apple made a significant comeback with several new Mac computers, the iPod, the iPhone, and iTunes. Microsoft launched the Vista operating system in 2007 to great expectations; however, it was plagued with bugs and problems.

As the recession worsened in 2008, the company found itself in a bind. Its brand image was tarnished from years of Apple's successful "Get a Mac" campaign, a series of commercials that featured a smart, creative, easygoing Mac character alongside a geeky, virus-prone, uptight PC character. In addition, consumers and analysts continued to slam Vista for its poor performance.

In response, Microsoft created a campaign entitled "Windows. Life Without Walls" to help turn its image around. The company focused on how cost effective computers with its software were, a message that resonated well in the recession. It launched a series of commercials boasting "I'm a PC" that began with a Microsoft employee (looking very similar to the PC

character from the Apple ads) stating, "Hello, I'm a PC and I've been made into a stereotype." The commercials, which highlighted a wide variety of individuals who prided themselves on being PC owners, helped improve employee morale and customer loyalty.

Microsoft opened a handful of retail stores—similar to Apple stores—in 2009. "The purpose of opening these stores is to create deeper engagement with consumers and continue to learn firsthand about what they want and how they buy," Microsoft said in a statement.

Today, the company offers a wide range of software and home entertainment products. In the ongoing browser wars, Internet Explorer holds a 66 percent market share compared to Firefox's 22 percent and Safari's 8 percent. In 2009, Microsoft launched a new search engine called Bing, which challenges Google's dominant position in the marketplace and claims to give better search results. Microsoft's most profitable products continue to be Microsoft Windows and Microsoft Office, which bring in approximately 90 percent of the company's $60 billion in revenue.

Questions

1. Evaluate Microsoft's strategy in good and poor economic times.

2. Discuss the pros and cons of Microsoft's most recent "I'm a PC" campaign. Is Microsoft doing a good thing by acknowledging Apple's campaign in its own marketing message? Why or why not?

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Marketing Excellence

>>Walmart

Walmart, the giant chain of discount stores, is the second largest company in the world, with over $400 billion in revenue and 2.1 million associates (or employees). The phenomenal success story began in 1962 when Sam Walton opened up his first discount store in Rogers, Arkansas. He sold the same products as his competitors but kept prices lower by reducing his profit margin. His customers quickly caught on and the company took off almost immediately. Walton's EDLP (Every Day Low Price) strategy remains the foundation of Walmart's success today. Through the company's economies of scale, Walmart is able to offer customers top brand-name products for the lowest price.

Walmart expanded throughout the United States in the 1970s and 1980s by acquiring some of its competitors and opening new stores. The first Walmart Supercenter—a discount store with food outlets, an optical center, photo lab, hair salon, among other amenities—opened in 1988. By 1990, Walmart had become the nation's number one retailer, with $32 billion in revenue and stores in 33 states. The company's international expansion began with a store outside Mexico City in 1991 and has grown to over 3,800 international locations, some under a different brand name.

Walmart thrives on three basic beliefs and values: "Respect for the Individual," "Service to Our Customers," and "Striving for Excellence." Sam Walton's original 10-foot rule—"I promise that whenever I come within 10 feet of a customer, I will look him in the eye, greet him, and ask if I can help him."—still governs today, embodied by the "greeters" at the front door. In addition, Walmart embraces the communities in which it enters in order to develop strong local relationships and build its brand image in the area. The company donates significant amounts of money to local charities through its "Good Works" program, hires local individuals, and purchases food from local farmers.

Walmart's marketing strategy has evolved over the years. Early marketing efforts were based on word of mouth, positive PR, and aggressive store expansion. In 1992, Walmart introduced its well-known tagline, "Always Low Prices. Always," which effectively communicated the company's core brand promise and resonated with millions. In 1996, Walmart launched its price rollback campaign featuring the familiar yellow smiley face as the star of the campaign. The smiley face happily slashed prices in Walmart's television commercials and appeared on store signage as well as

employees' aprons and buttons. The campaign helped Walmart's stock soar 1173 percent in the 1990s.

Walmart hit a few bumps in the road as it entered the 21st century, and critics protested its entry into small communities. In one study at Iowa State University, researchers found that within 10 years of a new Walmart store opening, up to one-half of the small stores in that town can disappear. Walmart also faced multiple lawsuits from employees who complained about poor work conditions, exposure to health hazards, and pay below minimum wage, which left employees with families below the poverty line. In some cases, employees said Walmart failed to pay for overtime and prevented them from taking rest or lunch breaks. Another lawsuit claimed the company discriminated against women in awarding pay and promotions. These problems led to a very high turnover rate in the 2000s. According to one Walmart survey, 70 percent of employees left the company within the first year of employment due to lack of recognition and inadequate pay.

From 2000 to 2005, Walmart's stock price fell 27 percent and remained low from 2005 to 2007. Negative backlash, combined with Target's reemergence on the retail scene, contributed to the decline. Target revamped its stores, merchandise, and marketing strategy to appeal to a more aspirational discount buyer and stole some of Walmart's top-tier customers. Target stores were nicely lit, offering wider aisles and better-displayed merchandise. Target's television commercials featured attractive models and trendy clothes from high-end designers such as Isaac Mizrahi and Liz Lange. One analyst stated, "Target tends to have more upscale customers who don't feel the effects of gasoline prices and other economic factors as much as Walmart's core customers might." From 2003 to 2007, Target outperformed Walmart in same-store sales growth by 1.7 percent and profit growth by 5.7 percent. During this time, Walmart also lost the exclusive rights to use the smiley face in its marketing campaign.

For all these—and other—reasons, Walmart decided it was time for a new direction and launched a series of new initiatives to help improve sales and its image. First, it introduced a highly successful $4 generic drug campaign, a program eventually copied by Target. Walmart also launched several environmentally friendly initiatives such as constructing new buildings from recycled materials, cutting transportation costs and energy usage, and encouraging customers to buy more green products.

In 2007, Walmart introduced a new marketing campaign and tagline, "Save Money. Live Better." Television commercials highlighted the company's positive impact on decreased energy costs, increased 401(k) (retirement) savings, good employee health care coverage, and increased family savings. One commercial stated, "In today's economy, nobody's more committed to helping family budgets go further than Walmart. Walmart saves the average family about $3,100 a year, no matter where they shop."

Walmart also used the new campaign and aggressive price cuts to attract new consumers affected by the recession. It slashed prices on popular toys and electronics during the holidays and implemented a massive store remodeling effort called Project Impact. As a result, stores became cleaner, aisles less cluttered, and merchandise easier to reach—all to help improve the overall shopping experience and steal customers from Target.

Walmart's tactics worked: Same-store sales rose and its stock price improved during the recession. Analysts explained that Walmart's product mix—45 percent consumables (food, beauty, health items)—is a better strategy in a poor economy than Target's product mix—20 percent consumables and 40 percent home and apparel products. One analyst said, "Walmart sells what you need to have as opposed to what you want to have."

Stephen Quinn, Walmart's CMO, stated, "We are fortunate that this recession came along. It played to our positioning really well. But our own insecurity is that all the credit would go to the external environment and none of the work we all did. The kinds of things we were working on anyway when this environment came along are the same things we need to do to keep these so-called new customers and I think continued to build loyalty with our existing base."

Today, Walmart has stores in 16 international markets and serves more than 200 million customers a week through its variety of discount stores. These include Walmart Supercenters, Discount Stores, Neighborhood Markets, and Sam's Club warehouses.

Questions

1. Evaluate Walmart's new marketing campaign and tagline. Did the company make the right decision to drop "Always Low Prices. Always." as a tagline? Why or why not?

2. Walmart does very well when the economy turns sour. How can it protect itself when the economy is on the rise? Explain.

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In This Chapter, We Will Address the Following Questions

1. What constitutes good marketing research?

2. What are the best metrics for measuring marketing productivity?

3. How can marketers assess their return on investment of marketing expenditures?

Insightful consumer research helped Kimberly-Clark improve its Huggies diapers and gain share in the market.

Conducting Marketing Research

Good marketers need insights to help them interpret past performance as well as plan future activities. To make the best possible tactical decisions in the short run and strategic decisions in the long run, they need timely, accurate, and actionable information about consumers, competition, and their brands. Discovering a consumer insight and understanding its marketing implications can often lead to a successful product launch or spur the growth of a brand.

A series of novel consumer innovations through the years—including Kleenex facial tissues, Kotex feminine napkins, and others—have transformed Kimberly-Clark from a paper mill company to a consumer products powerhouse. Among the company's recent successes was Huggies Supreme Natural Fit, named one of the most successful new product launches in 2007. Nearly three years of research and design were invested in the creation of the new diaper. After assembling a sample of new mothers from different parts of the country with different income backgrounds and ethnicities, Kimberly-Clark's marketers conducted in-home interviews and placed motion-activated cameras in homes to learn about diaper-changing routines. Seeing new moms constantly struggle to straighten a squirming baby's legs when putting on a diaper led to the insight that the new diaper also needed to be shaped to better follow the curves of a baby's body. Because mothers said they wanted their older babies to feel like they weren't wearing a diaper, the new diaper also had to be thinner with a closer fit, so new polymers cut the width of the imbedded absorbent by 16 percent and stretch was added to the back waistband. When research also revealed that moms often used the cartoon graphics on another diaper to distract the baby during a diaper change, more active images of Disney-licensed Winnie the Pooh characters were added. The successful launch of the research-inspired innovation boosted Kimberly-Clark's market share by one to two percentage points and significantly contributed to the company's $4 billion-plus sales in diapers that year.[1]

In this chapter, we review the steps in the marketing research process. We also consider how marketers can develop effective metrics for measuring marketing productivity.

The Marketing Research System

Marketing managers often commission formal marketing studies of specific problems and opportunities. They may request a market survey, a product-preference test, a sales forecast by region, or an advertising evaluation. It's the job of the marketing researcher to produce insight into the customer's attitudes and buying behavior. **Marketing insights** provide diagnostic information about how and why we observe certain effects in the marketplace, and what that means to marketers.[2]

Good marketing insights often form the basis of successful marketing programs. When an extensive consumer research study of U.S. retail shoppers by Walmart revealed that the store's key competitive advantages were the functional benefit of "offers low prices" and the emotional benefit

of "makes me feel like a smart shopper," its marketers used those insights to develop their "Save Money, Live Better" campaign. Gillette's Venus razor has become the most successful female shaving line ever—holding more than 50 percent of the global women's shaving market—as a result of insightful consumer research that led to product design, packaging, and advertising cues that better satisfied female shaving needs.[3]

Venus Razor   As part of a $300 million budget for the development of its first razor designed solely for women, Gillette conducted extensive consumer research and performed numerous market tests. The razor, called Venus, was a marked departure from previous women's razor designs, which had essentially been colored or repackaged versions of men's razors. After research revealed that women change their grip on a razor about 30 times during each shaving session, Gillette designed the Venus with a wide, sculpted rubberized handle offering superior grip and control, and an oval-shaped blade in a storage case that could stick to shower walls. Research also indicated that women were reluctant to leave the shower in order to replace a dull blade, so the case was made to hold spare blade cartridges. When Gillette research later revealed four distinct segments of women shavers—perfect shave seekers (no missed hairs), skin pamperers, pragmatic functionalists, and EZ seekers—the company designed Venus products for each of them.

Extensive consumer research was crucial to the success of Gillette's Venus series of razors designed exclusively for women.

Gaining marketing insights is crucial for marketing success. If marketers lack consumer insights, they often get in trouble. When Tropicana redesigned its orange juice packaging, dropping the iconic image of an orange skewered by a straw, it failed to adequately test for consumer reactions, with disastrous results. Sales dropped by 20 percent, and Tropicana reinstated the old package design after only a few months.[4]

We define **marketing research** as the systematic design, collection, analysis, and reporting of data and findings relevant to a specific marketing situation facing the company. Spending on marketing research topped $28 billion globally in 2009, according to ESOMAR, the world association of opinion and market research professionals.[5] Most large companies have their own marketing research departments, which often play crucial roles within the organization. Procter & Gamble's Consumer & Market Knowledge (CMK) market research function has dedicated CMK groups working for P&G businesses around the world to improve both their brand strategies and program execution, as well as a relatively smaller, centralized corporate CMK group that focuses on a variety of big-picture concerns that transcend any specific line of business.

Marketing research, however, is not limited to large companies with big budgets and marketing research departments. Often at much smaller companies, everyone carries out marketing research—including the customers. Small companies can also hire the services of a marketing research firm or conduct research in creative and affordable ways, such as:

1. *Engaging students or professors to design and carry out projects*—Companies such as American Express, Booz Allen Hamilton, GE, Hilton Hotels, IBM, Mars, Price Chopper, and Whirlpool engage in "crowdcasting" and are sponsors of competitions such as the Innovation Challenge, where top MBA students compete in teams. The payoff to the students is experience and visibility; the payoff to the companies is a fresh sets of eyes to solve problems at a fraction of what consultants would charge.[6]
2. *Using the Internet*—A company can collect considerable information at very little cost by examining competitors' Web sites, monitoring chat rooms, and accessing published data.
3. *Checking out rivals*—Many small businesses, such as restaurants, hotels, or specialty retailers, routinely visit competitors to learn about changes they have made.
4. *Tapping into marketing partner expertise*—Marketing research firms, ad agencies, distributors, and other marketing partners may be able to share relevant market knowledge they have accumulated. Those partners targeting small or medium-sized businesses may be especially

helpful. For example, to promote more shipping to China, UPS conducted several in-depth surveys of the Chinese market to portray its complexities but also its opportunities for even small and medium-sized businesses.[7]

Most companies use a combination of marketing research resources to study their industries, competitors, audiences, and channel strategies. Companies normally budget marketing research at 1 percent to 2 percent of company sales and spend a large percentage of that on the services of outside firms. Marketing research firms fall into three categories:

1. *Syndicated-service research firms*—These firms gather consumer and trade information, which they sell for a fee. Examples include the Nielsen Company, Kantar Group, Westat, and IRI.
2. *Custom marketing research firms*—These firms are hired to carry out specific projects. They design the study and report the findings.
3. *Specialty-line marketing research firms*—These firms provide specialized research services. The best example is the field-service firm, which sells field interviewing services to other firms.

To take advantage of all these different resources and practices, good marketers adopt a formal marketing research process.

The Marketing Research Process

Effective marketing research follows the six steps shown in △ Figure 4.1. We illustrate them in the following situation.[8]
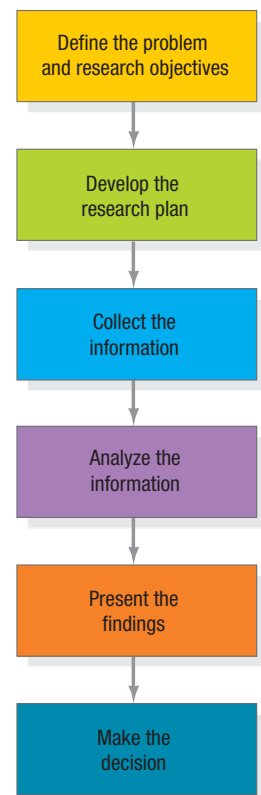
American Airlines (AA) was one of the first companies to install phone handsets on its planes. Now it's reviewing many new ideas, especially to cater to its first-class passengers on very long flights, mainly businesspeople whose high-priced tickets pay most of the freight. Among these ideas are: (1) an Internet connection primarily for e-mail but with some limited access to Web pages, (2) 24 channels of satellite cable TV, and (3) a 50-CD audio system that lets each passenger create a customized in-flight play list. The marketing research manager was assigned to investigate how first-class passengers would rate these services, specifically the Internet connection, and how much extra they would be willing to pay for it. One source estimates revenues of $70 billion from in-flight Internet access over 10 years, if enough first-class passengers paid $25. AA could thus recover its costs in a reasonable time. Making the connection available would cost the airline $90,000 per plane.[9]

Step 1: Define the Problem, the Decision Alternatives, and the Research Objectives

Marketing managers must be careful not to define the problem too broadly or too narrowly for the marketing researcher. A marketing manager who says, "Find out everything you can about first-class air travelers' needs," will collect a lot of unnecessary information. One who says, "Find out whether enough passengers aboard a B747 flying direct between Chicago and Tokyo would be willing to pay $25 for an Internet connection for American Airlines to break even in one year on the cost of offering this service," is taking too narrow a view of the problem.

The marketing researcher might even ask, "Why does the Internet connection have to be priced at $25 as opposed to $15, $35, or some other price? Why does American have to break even on the cost of the service, especially if it attracts new customers?" Another relevant question to ask is, "How important is it to be first in the market, and how long can the company sustain its lead?"

The marketing manager and marketing researcher agreed to define the problem as follows: "Will offering an in-flight Internet service create enough incremental preference and profit for American Airlines to justify its cost against other possible investments in service enhancements American might make?" To help in designing the research, management should first spell out the decisions it might face and then work backward. Suppose management outlines these decisions: (1) Should American offer an Internet connection? (2) If so, should we offer the service to first-class only, or

|Fig. 4.1| △

The Marketing Research Process

- Define the problem and research objectives
- Develop the research plan
- Collect the information
- Analyze the information
- Present the findings
- Make the decision

An airline looking to add in-flight Internet service would need to conduct careful consumer research.

include business class, and possibly economy class? (3) What price(s) should we charge? (4) On what types of planes and lengths of trips should we offer the service?

Now management and marketing researchers are ready to set specific research objectives: (1) What types of first-class passengers would respond most to using an in-flight Internet service? (2) How many first-class passengers are likely to use the Internet service at different price levels? (3) How many extra first-class passengers might choose American because of this new service? (4) How much long-term goodwill will this service add to American Airlines' image? (5) How important is Internet service to first-class passengers relative to other services, such as a power plug or enhanced entertainment?

Not all research projects can be this specific. Some research is *exploratory*—its goal is to shed light on the real nature of the problem and to suggest possible solutions or new ideas. Some research is *descriptive*—it seeks to quantify demand, such as how many first-class passengers would purchase in-flight Internet service at $25. Some research is *causal*—its purpose is to test a cause-and-effect relationship.

Step 2: Develop the Research Plan

The second stage of marketing research is where we develop the most efficient plan for gathering the needed information and what that will cost. Suppose American made a prior estimate that launching in-flight Internet service would yield a long-term profit of $50,000. If the manager believes that doing the marketing research will lead to an improved pricing and promotional plan and a long-term profit of $90,000, he should be willing to spend up to $40,000 on this research. If the research will cost more than $40,000, it's not worth doing.[10]

To design a research plan, we need to make decisions about the data sources, research approaches, research instruments, sampling plan, and contact methods.

DATA SOURCES   The researcher can gather secondary data, primary data, or both. *Secondary data* are data that were collected for another purpose and already exist somewhere. *Primary data* are data freshly gathered for a specific purpose or for a specific research project.

Researchers usually start their investigation by examining some of the rich variety of low-cost and readily available secondary data, to see whether they can partly or wholly solve the problem without collecting costly primary data. For instance, auto advertisers looking to get a better return on their online car ads might purchase a copy of J.D. Power and Associates' semiannual Power Auto Online Media Study, a survey that gives insights into who buys specific brands and where on the Web advertisers can find them.[11]

When the needed data don't exist or are dated, inaccurate, incomplete, or unreliable, the researcher will need to collect primary data. Most marketing research projects do include some primary-data collection.

RESEARCH APPROACHES Marketers collect primary data in five main ways: through observation, focus groups, surveys, behavioral data, and experiments.

Observational Research Researchers can gather fresh data by observing the relevant actors and settings unobtrusively as they shop or consume products.[12] Sometimes they equip consumers with pagers and instruct them to write down what they're doing whenever prompted, or they hold informal interview sessions at a café or bar. Photographs can also provide a wealth of detailed information.

Ethnographic research is a particular observational research approach that uses concepts and tools from anthropology and other social science disciplines to provide deep cultural understanding of how people live and work.[13] The goal is to immerse the researcher into consumers' lives to uncover unarticulated desires that might not surface in any other form of research.[14] Firms such as Fujitsu Laboratories, Herman Miller, IBM, Intel, Steelcase, and Xerox have embraced ethnographic research to design breakthrough products. Here are three specific examples.

- Bank of America's ethnographic research that followed female baby boomers at home and while they shopped yielded two insights—women rounded up financial transactions because it was more convenient, and those with children found it difficult to save. Subsequent research led to the launch of "Keep the Change," a debit card program that rounded purchases up to the nearest dollar amount and automatically transferred the added difference from a checking to a savings account. Since the launch, 2.5 million customers have signed up for the program, opening 800,000 new checking accounts and 3 million new savings accounts in the process.[15]
- To boost sagging sales for its Orville Redenbacher popcorn, ConAgra spent nine months observing families in their homes and assembling their weekly diaries of how they felt about various snacks. In reviewing the results, ConAgra found a key insight: the essence of popcorn was that it was a "facilitator of interaction." Four nationwide TV ads followed with the tagline, "Spending Time Together: That's the Power of Orville Redenbacher."[16]
- When package design firm 4sight, Inc., was hired by PepsiCo to come up with a new design for Gatorade's 64-ounce package, its team initially assumed the package functioned as a "family pack" to be used for multiple servings to multiple users in the household. In watching moms in their homes, however, team members were surprised to find them taking the jug out of the refrigerator—for example, after a hard workout—and chugging it right there on the spot! That insight led to a totally different package design, one that could be easily gripped and grabbed.[17]

Ethnographic research isn't limited to consumer companies in developed markets. In a business-to-business setting, GE's ethnographic research into the plastic-fiber industry revealed to the firm that it wasn't in a commodity business driven by price, as it had assumed. Instead it was in an artisanal industry, with customers who wanted collaborations at the earliest stages of development. GE completely reoriented the way it interacted with the companies in the industry as a result. In developing markets, ethnographic research also can be very useful, especially in far-flung rural areas, given that marketers often do not know these consumers as well.[18]

The American Airlines researchers might meander around first-class lounges to hear how travelers talk about the different carriers and their features or sit next to passengers on planes. They can fly on competitors' planes to observe in-flight service.

Focus Group Research A **focus group** is a gathering of 6 to 10 people carefully selected by researchers based on certain

Ethnographic research with female baby boomers helped Bank of America launch its well-received "Keep the Change" program.

demographic, psychographic, or other considerations and brought together to discuss various topics of interest at length. Participants are normally paid a small sum for attending. A professional research moderator provides questions and probes based on the marketing managers' discussion guide or agenda. In focus groups, moderators try to discern consumers' real motivations and why they say and do certain things. They typically record the sessions, and marketing managers often remain behind two-way mirrors in the next room. To allow for more in-depth discussion with participants, focus groups are trending smaller in size.[19]

Focus-group research is a useful exploratory step, but researchers must avoid generalizing from focus-group participants to the whole market, because the sample size is too small and the sample is not drawn randomly. Some marketers feel the research setting is too contrived and prefer to seek other means of collecting information that they believe are less artificial. "Marketing Memo: Conducting Informative Focus Groups" has some practical tips to improve the quality of focus groups.

In the American Airlines research, the moderator might start with a broad question, such as, "How do you feel about first-class air travel?" Questions then move to how people view the different airlines, different existing services, different proposed services, and specifically, Internet service.

marketing Memo

Conducting Informative Focus Groups

Focus groups allow marketers to observe how and why consumers accept or reject concepts, ideas, or any specific notion. The key to using focus groups successfully is to *listen and observe.* Marketers should eliminate their own biases as much as possible. Although many useful insights can emerge from thoughtfully run focus groups, questions can arise about their validity, especially in today's complex marketing environment.

There are many challenges to conducting a good focus group. Some researchers believe consumers have been so bombarded with ads, they unconsciously (or perhaps cynically) parrot back what they've already heard instead of what they really think. There's always a concern that participants are just trying to maintain their self-image and public persona or have a need to identify with the other members of the group. Participants also may not be willing to acknowledge in public—or may not even recognize—their behavior patterns and motivations. And the "loudmouth" or "know-it-all" problem often crops up when one highly opinionated person drowns out the rest of the group. Getting the right participants is crucial, but it may be expensive to recruit qualified subjects who meet the sampling criteria ($3,000 to $5,000 per group).

Even when marketers use multiple focus groups, it may be difficult to generalize the results to a broader population. For example, within the United States, focus-group findings often vary from region to region. One firm specializing in focus-group research claimed the best city to conduct groups was Minneapolis, because there it could get a sample of fairly well-educated people who were honest and forthcoming with their opinions. Many marketers interpret focus groups in New York and other northeastern cities carefully, because the people in these areas tend to be highly critical and generally don't report that they like much.

Participants must feel as relaxed as possible and strongly motivated to be truthful. Physical surroundings can be crucial to achieving the right atmosphere. At one agency an executive noted, "We wondered why people always seemed grumpy and negative—people were resistant to any idea we showed them." Finally in one session a fight broke out between participants. The problem was the room itself: cramped, stifling, forbidding. "It was a cross between a hospital room and a police interrogation room." To fix the problem, the agency gave the room a makeover. Other firms are adapting the look of the room to fit the theme of the topic—such as designing the room to look like a playroom when speaking to children.

To allow for more interactivity among focus group members, some researchers are incorporating pre-session homework assignments such as diaries, photography, and videography. An area of increasing interest is online focus groups. These may cost less than a fourth of a traditional, in-person focus group. Online focus groups also offer the advantages of being less intrusive, allowing geographically diverse subjects to participate, and yielding fast results. They are useful at collecting reactions to focused topics such as a specific new product concept.

Proponents of traditional focus groups, on the other hand, maintain that in-person focus groups allow marketers to be immersed in the research process, get a close-up look to people's emotional and physical reactions, and ensure that sensitive materials are not leaked. Marketers can also make spontaneous adjustments to the flow of discussion and delve deeply into more complex topics, such as alternative creative concepts for a new ad campaign.

Regardless of the particular form it takes, the beauty of a focus group, as one marketing executive noted, is that "it's still the most cost-effective, quickest, dirtiest way to get information in rapid time on an idea." In analyzing the pros and cons, Wharton's Americus Reed might have said it best: "A focus group is like a chain saw. If you know what you're doing, it's very useful and effective. If you don't, you could lose a limb."

Sources: Naomi R. Henderson, "Beyond Top of Mind," *Marketing Research* (September 1, 2005); Rebecca Harris, "Do Focus Groups Have a Future?" *Marketing,* June 6, 2005, p. 17; Linda Tischler, "Every Move You Make," *Fast Company,* April 2004, pp. 73–75; Alison Stein Wellner, "The New Science of Focus Groups," *American Demographics,* March 2003, pp. 29–33; Dennis Rook, "Out-of-Focus Groups," *Marketing Research* 15, no. 2 (Summer 2003), p. 11; Dennis W. Rook, "Loss of Vision: Focus Groups Fail to Connect Theory, Current Practice," *Marketing News,* September 15, 2003, p. 40; Sarah Jeffrey Kasner, "Fistfights and Feng Shui," *Boston Globe,* July 21, 2001; Piet Levy, "In With the Old, In Spite of the New," *Marketing News,* May 30, 2009, p. 19.

Survey Research Companies undertake surveys to assess people's knowledge, beliefs, preferences, and satisfaction and to measure these magnitudes in the general population. A company such as American Airlines might prepare its own survey instrument to gather the information it needs, or it might add questions to an omnibus survey that carries the questions of several companies, at a much lower cost. It can also pose the questions to an ongoing consumer panel run by itself or another company. It may do a mall intercept study by having researchers approach people in a shopping mall and ask them questions.

As we'll discuss in more detail later in this chapter, many marketers are taking their surveys online where they can easily develop, administer, and collect e-mail and Web-based questionnaires. However they conduct their surveys—online, by phone, or in person—companies must feel the information they're getting from the mounds of data makes it all worthwhile. San Francisco–based Wells Fargo bank collects more than 50,000 customer surveys each month through its bank branches. It has used customers' comments to begin more stringent new wait-time standards designed to improve customer satisfaction.

Of course, by putting out so many surveys each month, companies may run the risk of creating "survey burnout" and seeing response rates plummet. Keeping a survey short and simple and contacting customers no more than once a month are two keys to drawing people into the data collection effort. Offering incentives is another way companies get consumers to respond. Both Gap and Jack in the Box offer coupons for discount merchandise or the chance to win a cash prize.[20]

BEHAVIORAL RESEARCH Customers leave traces of their purchasing behavior in store scanning data, catalog purchases, and customer databases. Marketers can learn much by analyzing these data. Actual purchases reflect consumers' preferences and often are more reliable than statements they offer to market researchers. For example, grocery shopping data show that high-income people don't necessarily buy the more expensive brands, contrary to what they might state in interviews; and many low-income people buy some expensive brands. And as Chapter 3 described, there is a wealth of online data to collect from consumers. Clearly, American Airlines can learn many useful things about its passengers by analyzing ticket purchase records and online behavior.

EXPERIMENTAL RESEARCH The most scientifically valid research is **experimental research**, designed to capture cause-and-effect relationships by eliminating competing explanations of the observed findings. If the experiment is well designed and executed, research and marketing managers can have confidence in the conclusions. Experiments call for selecting matched groups of subjects, subjecting them to different treatments, controlling extraneous variables, and checking whether observed response differences are statistically significant. If we

An important marketing research tool is focus groups.

can eliminate or control extraneous factors, we can relate the observed effects to the variations in the treatments or stimuli.

American Airlines might introduce in-flight Internet service on one of its regular flights from Chicago to Tokyo and charge $25 one week and $15 the next week. If the plane carried approximately the same number of first-class passengers each week and the particular weeks made no difference, the airline could relate any significant difference in the number of passengers using the service to the different prices charged.

RESEARCH INSTRUMENTS Marketing researchers have a choice of three main research instruments in collecting primary data: questionnaires, qualitative measures, and technological devices.

Questionnaires A **questionnaire** consists of a set of questions presented to respondents. Because of its flexibility, it is by far the most common instrument used to collect primary data. Researchers need to carefully develop, test, and debug questionnaires before administering them on a large scale. The form, wording, and sequence of the questions can all influence the responses. *Closed-end questions* specify all the possible answers and provide answers that are easier to interpret and tabulate. *Open-end questions* allow respondents to answer in their own words and often reveal more about how people think. They are especially useful in exploratory research, where the researcher is looking for insight into how people think rather than measuring how many people think a certain way. ▭ Table 4.1 provides examples of both types of questions; also see "Marketing Memo: Questionnaire Dos and Don'ts."

Qualitative Measures Some marketers prefer more qualitative methods for gauging consumer opinion, because consumer actions don't always match their answers to survey questions. *Qualitative research techniques* are relatively unstructured measurement approaches that permit a range of possible responses. Their variety is limited only by the creativity of the marketing researcher.

Because of the freedom it affords both researchers in their probes and consumers in their responses, qualitative research can often be an especially useful first step in exploring consumers' brand and product perceptions. It is indirect in nature, so consumers may be less guarded and reveal more about themselves in the process.

Qualitative research does have its drawbacks. Marketers must temper the in-depth insights that emerge with the fact that the samples are often very small and may not necessarily generalize to broader populations. And different researchers examining the same qualitative results may draw very different conclusions.

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marketing Memo

Questionnaire Dos and Don'ts

1. *Ensure that questions are without bias.* Don't lead the respondent into an answer.

2. *Make the questions as simple as possible.* Questions that include multiple ideas or two questions in one will confuse respondents.

3. *Make the questions specific.* Sometimes it's advisable to add memory cues. For example, be specific with time periods.

4. *Avoid jargon or shorthand.* Avoid trade jargon, acronyms, and initials not in everyday use.

5. *Steer clear of sophisticated or uncommon words.* Use only words in common speech.

6. *Avoid ambiguous words.* Words such as "*usually*" or "*frequently*" have no specific meaning.

7. *Avoid questions with a negative in them.* It is better to say, "Do you ever . . . ?" than "Do you never . . . ?"

8. *Avoid hypothetical questions.* It's difficult to answer questions about imaginary situations. Answers aren't necessarily reliable.

9. *Do not use words that could be misheard.* This is especially important when administering the interview over the telephone. "What is your opinion of sects?" could yield interesting but not necessarily relevant answers.

10. *Desensitize questions by using response bands.* To ask people their age or ask companies about employee turnover rates, offer a range of response bands instead of precise numbers.

11. *Ensure that fixed responses do not overlap.* Categories used in fixed-response questions should be distinct and not overlap.

12. *Allow for the answer "other" in fixed-response questions.* Precoded answers should always allow for a response other than those listed.

Source: Adapted from Paul Hague and Peter Jackson, *Market Research: A Guide to Planning, Methodology, and Evaluation* (London: Kogan Page, 1999). See also, Hans Baumgartner and Jan-Benedict E. M. Steenkamp, "Response Styles in Marketing Research: A Cross-National Investigation," *Journal of Marketing Research* (May 2001), pp. 143–56.

TABLE 4.1 💬 Types of Questions		
Name	**Description**	**Example**
A. Closed-End Questions		
Dichotomous	A question with two possible answers	In arranging this trip, did you personally phone American? Yes No
Multiple choice	A question with three or more answers	With whom are you traveling on this flight? ☐ No one ☐ Children only ☐ Spouse ☐ Business associates/friends/relatives ☐ Spouse and children ☐ An organized tour group
Likert scale	A statement with which the respondent shows the amount of agreement/disagreement	Small airlines generally give better service than large ones. Strongly disagree / Disagree / Neither agree nor disagree / Agree / Strongly agree 1_____ 2_____ 3_____ 4_____ 5_____
Semantic differential	A scale connecting two bipolar words. The respondent selects the point that represents his or her opinion.	American Airlines Large _____ Small Experienced _____ Inexperienced Modern _____ Old-fashioned
Importance scale	A scale that rates the importance of some attribute	Airline in-flight service to me is Extremely important / Very important / Somewhat important / Not very important / Not at all important 1_____ 2_____ 3_____ 4_____ 5_____
Rating scale	A scale that rates some attribute from "poor" to "excellent"	American in-flight service is Excellent / Very Good / Good / Fair / Poor 1_____ 2_____ 3_____ 4_____ 5_____
Intention-to-buy scale	A scale that describes the respondent's intention to buy	If an in-flight telephone were available on a long flight, I would Definitely buy / Probably buy / Not sure / Probably not buy / Definitely not buy 1_____ 2_____ 3_____ 4_____ 5_____
B. Open-End Questions		
Completely unstructured	A question that respondents can answer in an almost unlimited number of ways	What is your opinion of American Airlines?
Word association	Words are presented, one at a time, and respondents mention the first word that comes to mind.	What is the first word that comes to your mind when you hear the following? Airline_____ American_____ Travel_____
Sentence completion	An incomplete sentence is presented and respondents complete the sentence.	When I choose an airline, the most important consideration in my decision is _____ .
Story completion	An incomplete story is presented, and respondents are asked to complete it.	"I flew American a few days ago. I noticed that the exterior and interior of the plane had very bright colors. This aroused in me the following thoughts and feelings . . . ." Now complete the story.
Picture	A picture of two characters is presented, with one making a statement. Respondents are asked to identify with the other and fill in the empty balloon.	
Thematic Apperception Test (TAT)	A picture is presented and respondents are asked to make up a story about what they think is happening or may happen in the picture.	

Nevertheless, there is increasing interest in using qualitative methods. "Marketing Insight: Getting into the Heads of Consumers" describes the pioneering ZMET approach. Some other popular qualitative research approaches to get inside consumers' minds and find out what they think or feel about brands and products include:[21]

1. *Word associations*—Ask subjects what words come to mind when they hear the brand's name. "What does the Timex name mean to you? Tell me what comes to mind when you think of Timex watches." The primary purpose of free-association tasks is to identify the range of possible brand associations in consumers' minds.

2. *Projective techniques*—Give people an incomplete stimulus and ask them to complete it, or give them an ambiguous stimulus and ask them to make sense of it. One approach is "bubble exercises" in which empty bubbles, like those found in cartoons, appear in scenes of people buying or using certain products or services. Subjects fill in the bubble, indicating what they believe is happening or being said. Another technique is comparison tasks in which people compare brands to people, countries, animals, activities, fabrics, occupations, cars, magazines, vegetables, nationalities, or even other brands.

3. *Visualization*—Visualization requires people to create a collage from magazine photos or drawings to depict their perceptions.

Marketing Insight

Getting into the Heads of Consumers

Harvard Business School marketing professor Gerald Zaltman, with some of his research colleagues, has developed an in-depth methodology to uncover what consumers truly think and feel about products, services, brands, and other things. The basic assumption behind the Zaltman Metaphor Elicitation Technique (ZMET) is that most thoughts and feelings are unconscious and shaped by a set of "deep metaphors." **Deep metaphors** are basic frames or orientations that consumers have toward the world around them. Largely unconscious and universal, they recast everything someone thinks, hears, says, or does. According to Zaltman, there are seven main metaphors:

1. *Balance:* justice equilibrium and the interplay of elements;
2. *Transformation:* changes in substance and circumstance;
3. *Journey:* the meeting of past, present, and future;
4. *Container:* inclusion, exclusion, and other boundaries;
5. *Connection:* the need to relate to oneself and others;
6. *Resource:* acquisitions and their consequences; and
7. *Control:* sense of mastery, vulnerability, and well-being

The ZMET technique works by first asking participants in advance to select a minimum of 12 images from their own sources (magazines, catalogs, family photo albums) to represent their thoughts and feelings about the research topic. In a one-on-one interview, the study administrator uses advanced interview techniques to explore the images with the participant and reveal hidden meanings. Finally, the participants use a computer program to create a collage with these images that communicates their subconscious thoughts and feelings about the topic. The results often profoundly influence marketing actions, as the following three examples illustrate:

• In a ZMET study about pantyhose for marketers at DuPont, some respondents' pictures showed fence posts encased in plastic wrap or steel bands strangling trees, suggesting that pantyhose are tight and inconvenient. But another picture showed tall flowers in a vase, suggesting that the product made a woman feel thin, tall, and sexy. The "love-hate" relationship in these and other pictures suggested a more complicated product relationship than the DuPont marketers had assumed.

• A ZMET study of Nestlé Crunch revealed that—besides the obvious associations to a small indulgence in a busy world, a source of quick energy, and something that just tasted good—the candy bar was also seen as a powerful reminder of pleasant childhood memories.

• When Motorola conducted a ZMET study of a proposed new security system, study participants selected images of what they felt when they were secure. The Motorola researchers were struck by how many images of dogs showed up, suggesting that it might be appropriate to position the product as a companion.

Sources: Gerald Zaltman and Lindsay Zaltman, *Marketing Metaphoria: What Deep Metaphors Reveal About the Minds of Consumers* (Boston: Harvard Business School Press, 2008); Daniel H. Pink, "Metaphor Marketing," *Fast Company*, March/April 1998, pp. 214–29; Brad Wieners, "Getting Inside—Way Inside—Your Customer's Head," *Business 2.0*, April 2003, pp. 54–55; Glenn L. Christensen and Jerry C. Olson, "Mapping Consumers' Mental Models with ZMET," *Psychology & Marketing* 19, no. 6 (June 2002), pp. 477–502; Emily Eakin, "Penetrating the Mind by Metaphor," *New York Times*, February 23, 2002.

4. **Brand personification**—Ask subjects what kind of person they think of when the brand is mentioned: "If the brand were to come alive as a person, what would it be like, what would it do, where would it live, what would it wear, who would it talk to if it went to a party (and what would it talk about)?" For example, the John Deere brand might make someone think of a rugged Midwestern male who is hardworking and trustworthy. The brand personality delivers a picture of the more human qualities of the brand.

5. **Laddering**—A series of increasingly more specific "why" questions can reveal consumer motivation and consumers' deeper, more abstract goals. Ask why someone wants to buy a Nokia cell phone. "They look well built" (attribute). "Why is it important that the phone be well built?" "It suggests Nokia is reliable" (a functional benefit). "Why is reliability important?" "Because my colleagues or family can be sure to reach me" (an emotional benefit). "Why must you be available to them at all times?" "I can help them if they're in trouble" (brand essence). The brand makes this person feel like a Good Samaritan, ready to help others.

Marketers don't necessarily have to choose between qualitative and quantitative measures, however, and many marketers use both approaches, recognizing that their pros and cons can offset each other. For example, companies can recruit someone from an online panel to participate in an in-home use test in which the subject is sent a product and told to capture his or her reactions and intentions with both a video diary and an online survey.[22]

Technological Devices There has been much interest in recent years in various technological devices. Galvanometers can measure the interest or emotions aroused by exposure to a specific ad or picture. The tachistoscope flashes an ad to a subject with an exposure interval that may range from less than one hundredth of a second to several seconds. After each exposure, the respondent describes everything he or she recalls. Eye cameras study respondents' eye movements to see where their eyes land first, how long they linger on a given item, and so on.

Technology has now advanced to such a degree that marketers can use devices such as skin sensors, brain wave scanners, and full body scanners to get consumer responses.[23] Some researchers study eye movements and brain activity of Web surfers to see which ads grab their attention.[24] "Marketing Insight: Understanding Brain Science" provides a glimpse into some new marketing research frontiers studying the brain.

Technology has replaced the diaries that participants in media surveys used to keep. Audiometers attached to television sets in participating homes now record when the set is on and to which channel it is tuned. Electronic devices can record the number of radio programs a person is exposed to during the day, or, using Global Positioning System (GPS) technology, how many billboards a person may walk or drive by during a day.

SAMPLING PLAN After deciding on the research approach and instruments, the marketing researcher must design a sampling plan. This calls for three decisions:

1. **Sampling unit: Whom should we survey?** In the American Airlines survey, should the sampling unit consist only of first-class business travelers, first-class vacation travelers, or both? Should it include travelers under age 18? Both traveler and spouse? Once they have determined the sampling unit, marketers must develop a sampling frame so everyone in the target population has an equal or known chance of being sampled.

2. **Sample size: How many people should we survey?** Large samples give more reliable results, but it's not necessary to sample the entire target population to achieve reliable results. Samples of less than 1 percent of a population can often provide good reliability, with a credible sampling procedure.

3. **Sampling procedure: How should we choose the respondents?** Probability sampling allows marketers to calculate confidence limits for sampling error and makes the sample more representative. Thus, after choosing the sample, marketers could conclude that "the interval five to seven trips per year has 95 chances in 100 of containing the true number of trips taken annually by first-class passengers flying between Chicago and Tokyo."

CONTACT METHODS Now the marketing researcher must decide how to contact the subjects: by mail, by telephone, in person, or online.

Using sophisticated equipment and methods, neuroscience researchers are studying how brain activity is affected by consumer marketing.

Marketing Insight
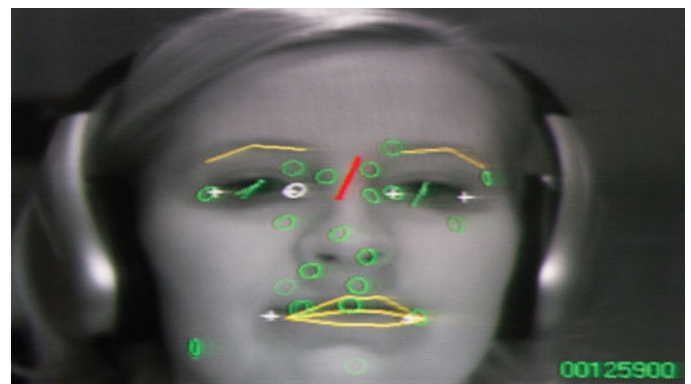
Understanding Brain Science

As an alternative to traditional consumer research, some researchers have begun to develop sophisticated techniques from neuroscience that monitor brain activity to better gauge consumer responses to marketing. The term *neuromarketing* describes brain research on the effect of marketing stimuli. Firms with names such as NeuroFocus and EmSense are using EEG (electroencephalograph) technology to correlate brand activity with physiological cues such as skin temperature or eye movement and thus gauge how people react to ads.

Researchers studying the brain have found different results from conventional research methods. One group of researchers at UCLA used functional magnetic resonance imaging (fMRI) to measure how consumers' brains responded to 2006's Super Bowl advertisements. They found that the ads for which subjects displayed the highest brain activity were different from the ads with the highest stated preferences. Other research found little effect from product placement unless the products in question played an integral role in the storyline.

One major research finding to emerge from neurological consumer research is that many purchase decisions appear to be characterized less by the logical weighing of variables and more "as a largely unconscious habitual process, as distinct from the rational, conscious, information-processing model of economists and traditional marketing textbooks." Even basic decisions, such as the purchase of gasoline, seem to be influenced by brain activity at the subrational level.

Neurological research has been used to measure the type of emotional response consumers exhibit when presented with marketing stimuli. A group of researchers in England used an EEG to monitor cognitive functions related to memory recall and attentiveness for 12 different regions of the brain as subjects were exposed to advertising. Brain wave activity in different regions indicated different emotional responses. For example, heightened activity in the left prefrontal cortex is characteristic of an "approach" response to an ad and indicates an attraction to the stimulus. In contrast, a spike in brain activity in the right prefrontal cortex is indicative of a strong revulsion to the stimulus. In yet another part of the brain, the degree of memory formation activity correlates with purchase intent. Other research has shown that people activate different regions of the brain in assessing the personality traits of people than they do when assessing brands.

By adding neurological techniques to their research arsenal, marketers are trying to move toward a more complete picture of what goes on inside consumers' heads. Although it may be able to offer different insights from conventional techniques, neurological research at this point is very costly, running as much as $100,000 or even more per project. Given the complexity of the human brain, however, many researchers caution that neurological research should not form the sole basis for marketing decisions. These research activities have not been universally accepted. The measurement devices to capture brain activity can be highly obtrusive, such as with skull caps studded with electrodes, creating artificial exposure conditions. Others question whether they offer unambiguous implications for marketing strategy. Brian Knutson, a professor of neuroscience and psychology at Stanford University, compares the use of EEG to "standing outside a baseball stadium and listening to the crowd to figure out what happened." Other critics worry that if the methods do become successful, they will only lead to more marketing manipulation by companies. Despite all this controversy, marketers' endless pursuit of deeper insights about consumers' response to marketing virtually guarantees continued interest in neuromarketing.

Sources: Carolyn Yoon, Angela H. Gutchess, Fred Feinberg, and Thad A. Polk, "A Functional Magnetic Resonance Imaging Study of Neural Dissociations between Brand and Person Judgments," *Journal of Consumer Research* 33 (June 2006), pp. 31–40; Daryl Travis, "Tap Buyers' Emotions for Marketing Success," *Marketing News*, February 1, 2006, pp. 21–22; Deborah L. Vence, "Pick Someone's Brain," *Marketing News*, May 1, 2006, pp. 11–13; Martin Lindstrom, *Buyology: Truth and Lies About Why We Buy* (New York: Doubleday, 2008); Tom Abate, "Coming to a Marketer Near You: Brain Scanning," *San Francisco Chronicle*, May 19, 2008; Brian Sternberg, "How Couch Potatoes Watch TV Could Hold Clues for Advertisers," *Boston Globe*, September 6, 2009, pp. G1, G3.

Mail Contacts The *mail questionnaire* is one way to reach people who would not give personal interviews or whose responses might be biased or distorted by the interviewers. Mail questionnaires require simple and clearly worded questions. Unfortunately, the response rate is usually low or slow.

Telephone Contacts *Telephone interviewing* is a good method for gathering information quickly; the interviewer is also able to clarify questions if respondents do not understand them. Interviews must be brief and not too personal. Although the response rate has typically been higher than for mailed questionnaires, telephone interviewing in the United States is getting more difficult because of consumers' growing antipathy toward telemarketers.

In late 2003, Congress passed legislation allowing the Federal Trade Commission to restrict telemarketing calls through its "Do Not Call" registry. By mid-2010, consumers had registered over 200 million phone numbers. Marketing research firms are exempt from the ruling, but given the increasingly widespread resistance to telemarketing, it undoubtedly reduces the effectiveness of telephone surveys as a marketing research method in the United States.

In other parts of the world, such restrictive legislation does not exist. Because mobile phone penetration in Africa has risen from just 1 in 50 people in 2000 to almost one-third of the population in 2008, cell phones in Africa are used to convene focus groups in rural areas and to interact via text messages.[25]

Personal Contacts *Personal interviewing* is the most versatile method. The interviewer can ask more questions and record additional observations about the respondent, such as dress and body language. At the same time, however, personal interviewing is the most expensive method, is subject to interviewer bias, and requires more administrative planning and supervision. Personal interviewing takes two forms. In *arranged interviews*, marketers contact respondents for an appointment and often offer a small payment or incentive. In *intercept interviews,* researchers stop people at a shopping mall or busy street corner and request an interview on the spot. Intercept interviews must be quick, and they run the risk of including nonprobability samples.

In parts of the developing world such as Africa, the widespread penetration of cell phones allows them to be used to conduct marketing research.

Online Contacts An approach of increasing importance, the Internet offers many ways to do research. A company can embed a questionnaire on its Web site and offer an incentive to answer it, or it can place a banner on a frequently visited site such as Yahoo!, inviting people to answer some questions and possibly win a prize. Online product testing, in which companies float trial balloons for new products, is also growing and providing information much faster than traditional new-product marketing research techniques. Here is how one small business is using the Internet to conduct research on new-product development.

Local Motors

Local Motors   The Web site of Local Motors of Wareham, Massachusetts, a small-scale automaker, lets anyone upload design ideas. The site occasionally hosts competitions for cash prizes of up to $10,000 in which registered members—who include trained design engineers and transportation experts—vote on the designs they like best, or other decisions related to building the autos and running the company. The winning ideas are then incorporated in the cars Local Motors builds. Members remain involved after the competitions, offering criticism and suggestions throughout the cars' development. Local Motors has been diligent about building its car design community by marketing the site on other sites that attract design enthusiasts and experts. To make sure outside contributors do not seek compensation if their ideas are adopted, Local Motors requires members of its online community to sign a lengthy legal agreement.[26]

Marketers can also host a real-time consumer panel or virtual focus group or sponsor a chat room, bulletin board, or blog and introduce questions from time to time. They can ask customers to brainstorm or have followers of the company on Twitter rate an idea. Online communities and networks of customers serve as a resource for a wide variety of companies. Insights from Kraft-sponsored online communities helped the company develop its popular line of 100-calorie snacks.[27] Here are two other examples.

- Del Monte tapped into its 400-member, handpicked online community called "I Love My Dog" when it was considering a new breakfast treat for dogs. The consensus request was for something with a bacon-and-egg taste and an extra dose of vitamins and minerals. Continuing to work with the online community throughout the product development, the company introduced fortified "Snausage Breakfast Bites" in half the time usually required to launch a new product.[28]

- InterContinental Hotel Groups uses both surveys and communities to gather data on customer satisfaction. Online surveys provide actionable and speedy results to correct customer service issues; the online community provides a sounding board for more in-depth, longer-term research objectives.[29]

Online research was estimated to make up 33 percent of all survey-based research in 2006, and Internet-based questionnaires also accounted for nearly one-third of U.S. spending on market

research surveys in the same year.[30] There are many other means to use the Internet as a research tool. The company can learn about individuals who visit its site by tracking how they *clickstream* through the Web site and move to other sites. It can post different prices, use different headlines, and offer different product features on different Web sites or at different times to learn the relative effectiveness of its offerings.

Yet, as popular as online research methods are, smart companies are choosing to use them to augment rather than replace more traditional methods. At Kraft Foods, online research is a supplement to traditional research, said Seth Diamond, director of consumer insights and strategy. "Online is not a solution in and of itself to all of our business challenges," he said, "but it does expand our toolkit."[31]

There are a number of pros and cons to online research.[32] Here are some advantages:

- *Online research is inexpensive.* A typical e-mail survey can cost between 20 percent and 50 percent less than what a conventional survey costs, and return rates can be as high as 50 percent.
- *Online research is fast.* Online surveys are fast because the survey can automatically direct respondents to applicable questions and transmit results immediately. One estimate says an online survey can generate 75 percent to 80 percent of the targeted response in 48 hours, compared to a telephone survey that can require 70 days to obtain 150 interviews.
- *People tend to be honest and thoughtful online.* People may be more open about their opinions when they can respond privately and not to another person whom they feel might be judging them, especially on sensitive topics (such as, "how often do you bathe or shower?"). Because they choose when and where they take the survey and how much time to devote to each question, they may be more relaxed, introspective, and candid.
- *Online research is versatile.* Increased broadband penetration offers online research even more flexibility and capabilities. For instance, virtual reality software lets visitors inspect 3-D models of products such as cameras, cars, and medical equipment and manipulate product characteristics. Even at the basic tactile level, online surveys can make answering a questionnaire easier and more fun than paper-and-pencil versions. Online community blogs allow customer participants to interact with each other.

Some disadvantages include:

- *Samples can be small and skewed.* Some 40 percent of households were without broadband Internet access in the United States in 2009; the percentage is even higher among lower-income groups, in rural areas, and in most parts of Asia, Latin America, and Central and Eastern Europe, where socioeconomic and education levels also differ.[33] Although it's certain that more and more people will go online, online market researchers must find creative ways to reach population segments on the other side of the "digital divide." One option is to combine offline sources with online findings. Providing temporary Internet access at locations such as malls and recreation centers is another strategy. Some research firms use statistical models to fill in the gaps in market research left by offline consumer segments.
- *Online panels and communities can suffer from excessive turnover.* Members may become bored with the company's efforts and flee. Or perhaps even worse, they may stay but only half-heartedly participate. Panel and community organizers are taking steps to address the quality of the panel and the data they provide by raising recruiting standards, downplaying incentives, and carefully monitoring participation and engagement levels. New features, events, and other activities must be constantly added to keep members interested and engaged.[34]
- *Online market research can suffer from technological problems and inconsistencies.* Problems can arise with online surveys because browser software varies. The Web designer's final product may look very different on the research subject's screen.

Online researchers have also begun to use text messaging in various ways—to conduct a chat with a respondent, to probe more deeply with a member of an online focus group, or to direct respondents to a Web site.[35] Text messaging is also a useful way to get teenagers to open up on topics.

Step 3: Collect the Information

The data collection phase of marketing research is generally the most expensive and the most prone to error. Marketers may conduct surveys in homes, over the phone, via the Internet, or at a central interviewing location like a shopping mall. Four major problems arise in surveys. Some respondents

will be away from home or otherwise inaccessible and must be contacted again or replaced. Other respondents will refuse to cooperate. Still others will give biased or dishonest answers. Finally, some interviewers will be biased or dishonest.

Internationally, one of the biggest obstacles to collecting information is the need to achieve consistency.[36] Latin American respondents may be uncomfortable with the impersonal nature of the Internet and need interactive elements in a survey so they feel they're talking to a real person. Respondents in Asia, on the other hand, may feel more pressure to conform and may therefore not be as forthcoming in focus groups as online. Sometimes the solution may be as simple as ensuring the right language is used.

Leica Surveying and Engineering When Leica Surveying and Engineering, a global provider of high-end surveying and measurement equipment, sought to gather competitive intelligence in its industry, it initially deployed surveys only in English, because the company's business was typically conducted in English, even across several different European countries. However, the response rate was dismal, even though the sample comprised individuals who had an affinity with the company. Closer review showed that the in-country sales representatives conducted business in their native languages. Consequently, the company redeployed its survey in various languages, such as Spanish and German, and the response rate doubled almost overnight.[37]

Step 4: Analyze the Information

The next-to-last step in the process is to extract findings by tabulating the data and developing summary measures. The researchers now compute averages and measures of dispersion for the major variables and apply some advanced statistical techniques and decision models in the hope of discovering additional findings. They may test different hypotheses and theories, applying sensitivity analysis to test assumptions and the strength of the conclusions.

Step 5: Present the Findings

As the last step, the researcher presents findings relevant to the major marketing decisions facing management. Researchers increasingly are being asked to play a more proactive, consulting role in translating data and information into insights and recommendations.[38] They're also considering ways to present research findings in as understandable and compelling a fashion as possible. "Marketing Insight: Bringing Marketing Research to Life with Personas" describes an approach that some researchers are using to maximize the impact of their consumer research findings.

The main survey findings for the American Airlines case showed that:

1. Passengers' chief reason for using in-flight Internet service would be to stay connected and receive and send e-mails. Some would also pass the time surfing the Web. This entertainment capability would require expensive broadband Internet access, but passengers stated they would be able to charge the cost and their companies would pay.
2. At $25, about 5 out of 10 first-class passengers would use Internet service during a flight; about 6 would use it at $15. Thus, a fee of $15 would produce less revenue ($90 = 6 × $15) than $25 ($125 = 5 × $25). Assuming the same flight takes place 365 days a year, American could collect $45,625 (= $125 × 365) annually. Given an investment of $90,000, it would take two years to break even.
3. Offering in-flight Internet service would strengthen the public's image of American Airlines as an innovative and progressive airline. American would gain some new passengers and customer goodwill.

Step 6: Make the Decision

The American Airlines managers who commissioned the research need to weigh the evidence. If their confidence in the findings is low, they may decide against introducing the in-flight Internet service. If they are predisposed to launching the service, the findings support their inclination.

Marketing Insight

Bringing Marketing Research to Life with Personas

To bring all the information and insights they have gained about their target market to life, some researchers are employing personas. *Personas* are detailed profiles of one, or perhaps a few, hypothetical target market consumers, imagined in terms of demographic, psychographic, geographic, or other descriptive attitudinal or behavioral information. Researchers may use photos, images, names, or short bios to help convey the particulars of the persona.

The rationale behind personas is to provide exemplars or archetypes of how the target customer looks, acts, and feels that are as true-to-life as possible, to ensure marketers within the organization fully understand and appreciate their target market and therefore incorporate a target-customer point of view in all their marketing decision making. Consider some applications:

- Chrysler designed rooms for two fictional characters—28-year-old single male Roberto Moore and 30-year-old pharmaceutical rep Jenny Sieverson—and decorated them to reflect the personality, lifestyles, and brand choices of these key targets for the Dodge Caliber and Jeep Compass.

- Specialty tool and equipment maker Campbell Hausfeld relied on the many retailers it supplied, including Home Depot and Lowe's, to help it keep in touch with consumers. After developing eight consumer profiles, including a female do-it-yourselfer and an elderly consumer, the firm was able to successfully launch new products such as drills that weighed less or that included a level for picture hanging.

- Unilever's biggest and most successful hair-care launch, for Sunsilk, was aided by insights into the target consumer the company dubbed "Katie." The Katie persona outlined the twenty-something female's hair-care needs, but also her perceptions and attitudes and the way she dealt with her everyday life "dramas."

Although personas provide vivid information to aid marketing decision making, marketers also have to be careful to not overgeneralize. Any target market may have a range of consumers who vary along a number of key dimensions. To accommodate these potential differences, researchers sometimes employ two to six personas. Best Buy used multiple personas to help redesign and relaunch GeekSquad.com, the online site of its fast-growing national computer-support service. Using quantitative, qualitative, and observational research, the firm developed five online customer personas to guide its Web redesign efforts:

- "Jill"—a suburban mom who uses technology and her computer daily and depends on the Geek Squad as an outsourced service akin to a landscape or plumber.

- "Charlie"—a 50-plus male who is curious about and interested in technology but needs an unintimidating guide.

- "Daryl"—a technologically savvy hands-on experimenter who occasionally needs a helping hand with his tech projects.

- "Luis"—a time-pressed small-business owner whose primary goal is to complete tasks as expediently as possible.

- "Nick"—a prospective Geek Squad agent who views the site critically and needs to be challenged.

To satisfy Charlie, a prominent 911 button was added to the upper right-hand corner in case a crisis arose, but to satisfy Nick, Best Buy created a whole channel devoted to geek information.

Sources: Dale Buss, "Reflections of Reality," *Point* (June 2006), pp. 10–11; Todd Wasserman, "Unilever, Whirlpool Get Personal with Personas," *Brandweek,* September 18, 2006, p. 13; Daniel B. Honigman, "Persona-fication," *Marketing News*, April 1, 2008, p. 8. Rick Roth, "Take Back Control of the Purchase," *Advertising Age*, September 3, 2007, p. 13. Lisa Sanders, "Major Marketers Get Wise to the Power of Assigning Personas," *Advertising Age*, April 9, 2007, p. 36.

They may even decide to study the issues further and do more research. The decision is theirs, but rigorously done research provides them with insight into the problem (see 🖥 Table 4.2).[39]

Some organizations use marketing decision support systems to help their marketing managers make better decisions. MIT's John Little defines a **marketing decision support system (MDSS)** as a coordinated collection of data, systems, tools, and techniques, with supporting software and hardware, by which an organization gathers and interprets relevant information from business and environment and turns it into a basis for marketing action.[40] Once a year, *Marketing News* lists hundreds of current marketing and sales software programs that assist in designing marketing research studies, segmenting markets, setting prices and advertising budgets, analyzing media, and planning sales force activity.[41]

Overcoming Barriers to the Use of Marketing Research

In spite of the rapid growth of marketing research, many companies still fail to use it sufficiently or correctly.[42] They may not understand what all marketing research is capable of and not provide the

To better understand what people thought of Cheetos snacks, researchers dressed up as the brand's Chester Cheetah character and interacted with consumers in the street.

TABLE 4.2 ⬭	The Seven Characteristics of Good Marketing Research
1. Scientific method	Effective marketing research uses the principles of the scientific method: careful observation, formulation of hypotheses, prediction, and testing.
2. Research creativity	In an award-winning research study to reposition Cheetos snacks, researchers dressed up in a brand mascot Chester Cheetah suit and walked around the streets of San Francisco. The response the character encountered led to the realization that even adults loved the fun and playfulness of Cheetos. The resulting repositioning led to a double-digit sales increase despite a tough business environment.[43]
3. Multiple methods	Marketing researchers shy away from overreliance on any one method. They also recognize the value of using two or three methods to increase confidence in the results.
4. Interdependence of models and data	Marketing researchers recognize that data are interpreted from underlying models that guide the type of information sought.
5. Value and cost of information	Marketing researchers show concern for estimating the value of information against its cost. Costs are typically easy to determine, but the value of research is harder to quantify. It depends on the reliability and validity of the findings and management's willingness to accept and act on those findings.
6. Healthy skepticism	Marketing researchers show a healthy skepticism toward glib assumptions made by managers about how a market works. They are alert to the problems caused by "marketing myths."
7. Ethical marketing	Marketing research benefits both the sponsoring company and its customers. The misuse of marketing research can harm or annoy consumers, increasing resentment at what consumers regard as an invasion of their privacy or a disguised sales pitch.

researcher the right problem definition and information from which to work. They may also have unrealistic expectations about what researchers can offer. Failure to use marketing research properly has led to numerous gaffes, including the following historic one.

Star Wars   In the 1970s, a successful marketing research executive left General Foods to try a daring gambit: bringing market research to Hollywood, to give film studios access to the same research that had spurred General Foods's success. A major film studio handed him a science fiction film proposal and asked him to research and predict its success or failure. His views would inform the studio's decision about whether to back the film. The research executive concluded the film would fail. For one, he argued, Watergate had made the United States less trusting of institutions and, as a result, its citizens in the 1970s prized realism and authenticity over science fiction. This particular film also had the word "*war*" in its title; he reasoned that viewers, suffering from post-Vietnam hangover, would stay away in droves. The film was *Star Wars*, which eventually grossed over $4.3 billion in box office receipts alone. What this researcher delivered was information, not insight. He failed to study the

Improperly conducted and interpreted consumer research almost killed Star Wars, one of the most successful film franchises of all time.

script itself, to see that it was a fundamentally human story—of love, conflict, loss, and redemption—that happened to play out against the backdrop of space.[44] 🔲

Measuring Marketing Productivity

Marketers are facing increased pressure to provide clear, quantifiable evidence to senior management as to how their marketing expenditures help the firm to achieve its goals and financial objectives. Although we can easily quantify marketing expenses and investments as inputs in the short run, the resulting outputs such as broader brand awareness, enhanced brand image, greater customer loyalty, and improved new product prospects may take months or even years to manifest themselves. Moreover, a whole host of internal changes within the organization and external changes in the marketing environment may coincide with the marketing expenditures, making it hard to isolate the effects of any particular marketing activity.[45]

Nevertheless, an important task of marketing research is to assess the efficiency and effectiveness of marketing activities. In one survey, 65 percent of marketers indicated that return on marketing investment was a concern.[46] A recent survey of the nation's leading technology Chief Marketing Officers revealed that over 80 percent of the companies surveyed expressed dissatisfaction with their ability to benchmark their marketing program's business impact and value.[47]

Marketing research can help address this increased need for accountability. Two complementary approaches to measuring marketing productivity are: (1) *marketing metrics* to assess marketing effects and (2) *marketing-mix modeling* to estimate causal relationships and measure how marketing activity affects outcomes. *Marketing dashboards* are a structured way to disseminate the insights gleaned from these two approaches within the organization.

Marketing Metrics

Marketers employ a wide variety of measures to assess marketing effects.[48] **Marketing metrics** is the set of measures that helps them quantify, compare, and interpret their marketing performance. Here is how two marketing executives look at marketing metrics to better understand marketing ROI at their companies: [49]

- The CMO of Mary Kay , Rhonda Shasteen, focuses on four long-term brand strength metrics—market awareness, consideration, trial, and 12-month beauty consultant productivity—as well as a number of short-term program-specific metrics like ad impressions, Web site traffic, and purchase conversion.
- The Virgin America VP of marketing, Porter Gale, looks at a broad set of online metrics—cost per acquisition, cost per click, and cost per thousand page impressions (CPM). She also looks at total dollars driven by natural and paid search and online display advertising as well as tracking results and other metrics from the offline world.

There are many different marketing measures; marketers choose one or more based on the particular issue they face or the problem they must solve. An advocate of simple, relevant metrics, the University of Virginia's Paul Farris draws an analogy to the way a Boeing 747 jet pilot decides what information to use from the vast array of instruments in the cockpit to fly the plane:[50]

Aircraft pilots have protocols. When they are sitting on the tarmac warming their engines waiting to take off, they are looking at certain things. When they are taxiing, they look at others. When they are in flight, they look at still others. There is a sequence of knowing when to pay attention to which metrics, which lets them have their cake and eat it too, in terms of the simplicity and complexity trade-off.

London Business School's Tim Ambler suggests that if firms think they are already measuring marketing performance adequately, they should ask themselves five questions:[51]

1. Do you routinely research consumer behavior (retention, acquisition, usage) and why consumers behave that way (awareness, satisfaction, perceived quality)?
2. Do you routinely report the results of this research to the board in a format integrated with financial marketing metrics?
3. In those reports, do you compare the results with the levels previously forecasted in the business plans?
4. Do you also compare them with the levels achieved by your key competitor using the same indicators?
5. Do you adjust short-term performance according to the change in your marketing-based asset(s)?

Ambler says firms must give priority to measuring and reporting marketing performance through marketing metrics. He believes they can split evaluation into two parts: (1) short-term results and (2) changes in brand equity. Short-term results often reflect profit-and-loss concerns as shown by sales turnover, shareholder value, or some combination of the two. Brand-equity measures could include customer awareness, attitudes, and behaviors; market share; relative price premium; number of complaints; distribution and availability; total number of customers; perceived quality, and loyalty and retention.[52]

Companies can also monitor an extensive set of internal metrics, such as innovation. For example, 3M tracks the proportion of sales resulting from its recent innovations. Ambler also recommends developing employee measures and metrics, arguing that "end users are the ultimate customers, but your own staff are your first; you need to measure the health of the internal market." Table 4.3 summarizes a list of popular internal and external marketing metrics from Ambler's survey in the United Kingdom.[53]

Carefully measuring the effects of a marketing activity or program helps ensure managers make the right decisions going forward. Seeking greater engagement with younger consumers, Servus Credit Union in Alberta, Canada, launched its "Young & Free Alberta" program featuring a competition to find a youth spokesperson for Alberta. To connect with young Albertans, Kelsey MacDonald, the 2010 winner, works with Servus to create daily blogs, post entertaining and educational videos at YoungFreeAlberta.com, and maintain a Facebook and Twitter presence.

TABLE 4.3 Sample Marketing Metrics	
I. External	**II. Internal**
Awareness	Awareness of goals
Market share (volume or value)	Commitment to goals
Relative price (market share value/volume)	Active innovation support
Number of complaints (level of dissatisfaction)	Resource adequacy
Consumer satisfaction	Staffing/skill levels
Distribution/availability	Desire to learn
Total number of customers	Willingness to change
Perceived quality/esteem	Freedom to fail
Loyalty/retention	Autonomy
Relative perceived quality	Relative employee satisfaction

Source: Tim Ambler, "What Does Marketing Success Look Like?" *Marketing Management* (Spring 2001), pp. 13–18. Reprinted with permission from Marketing Management, published by the American Marketing Association.

Canada's Servus Credit Union used research to validate the effects of the spokesperson for its Young & Free Alberta Spokester program. Kelsey MacDonald, shown here, was the 2010 contest winner.

Kelsey also attends events throughout Alberta where she interacts with the 17- to 25-year-old crowd in order to better understand their financial needs. Research validated the campaign's success, with more than 107 million impressions to the program generated through various forms of media and thousands of new accounts opened.[54]

Marketing-Mix Modeling

Marketing accountability also means that marketers must more precisely estimate the effects of different marketing investments. *Marketing-mix models* analyze data from a variety of sources, such as retailer scanner data, company shipment data, pricing, media, and promotion spending data, to understand more precisely the effects of specific marketing activities.[55] To deepen understanding, marketers can conduct multivariate analyses, such as regression analysis, to sort through how each marketing element influences marketing outcomes such as brand sales or market share.[56]

Especially popular with packaged-goods marketers such as Procter & Gamble, Clorox, and Colgate, the findings from marketing-mix modeling help allocate or reallocate expenditures. Analyses explore which part of ad budgets are wasted, what optimal spending levels are, and what minimum investment levels should be.[57]

Although marketing-mix modeling helps to isolate effects, it is less effective at assessing how different marketing elements work in combination. Wharton's Dave Reibstein also notes three other shortcomings:[58]

- Marketing-mix modeling focuses on incremental growth instead of baseline sales or long-term effects.
- The integration of important metrics such as customer satisfaction, awareness, and brand equity into marketing-mix modeling is limited.
- Marketing-mix modeling generally fails to incorporate metrics related to competitors, the trade, or the sales force (the average business spends far more on the sales force and trade promotion than on advertising or consumer promotion).

Marketing Dashboards

Firms are also employing organizational processes and systems to make sure they maximize the value of all these different metrics. Management can assemble a summary set of relevant internal and external measures in a *marketing dashboard* for synthesis and interpretation. Marketing dashboards are like the instrument panel in a car or plane, visually displaying real-time indicators to ensure proper functioning. They are only as good as the information on which they're based, but sophisticated visualization tools are helping bring data alive to improve understanding and analysis.[59]

Some companies are also appointing marketing controllers to review budget items and expenses. Increasingly, these controllers are using business intelligence software to create digital versions of marketing dashboards that aggregate data from disparate internal and external sources.

As input to the marketing dashboard, companies should include two key market-based scorecards that reflect performance and provide possible early warning signals.

- A **customer-performance scorecard** records how well the company is doing year after year on such customer-based measures as those shown in 🖥 Table 4.4. Management should set target goals for each measure and take action when results get out of bounds.
- A **stakeholder-performance scorecard** tracks the satisfaction of various constituencies who have a critical interest in and impact on the company's performance: employees, suppliers, banks, distributors, retailers, and stockholders. Again, management should take action when one or more groups register increased or above-norm levels of dissatisfaction.[60]

Some executives worry that they'll miss the big picture if they focus too much on a set of numbers on a dashboard. Some critics are concerned about privacy and the pressure the technique places on employees. But most experts feel the rewards offset the risks.[61] "Marketing Insight: Marketing Dashboards to Improve Effectiveness and Efficiency" provides practical advice about the development of these marketing tools.

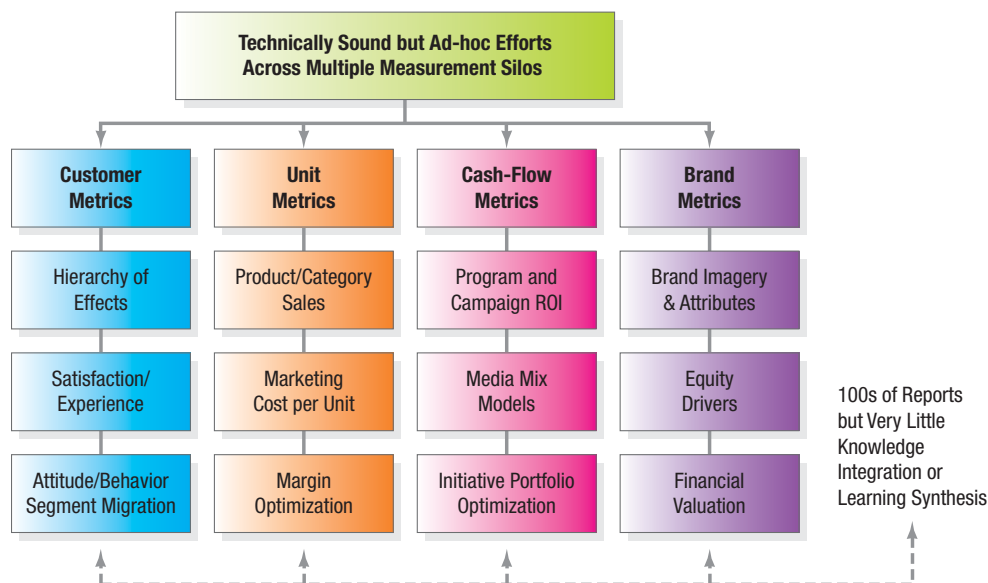| TABLE 4.4 🔲	Sample Customer-Performance Scorecard Measures
• Percentage of new customers to average number of customers
• Percentage of lost customers to average number of customers
• Percentage of win-back customers to average number of customers
• Percentage of customers falling into very dissatisfied, dissatisfied, neutral, satisfied, and very satisfied categories
• Percentage of customers who say they would repurchase the product
• Percentage of customers who say they would recommend the product to others
• Percentage of target market customers who have brand awareness or recall
• Percentage of customers who say that the company's product is the most preferred in its category
• Percentage of customers who correctly identify the brand's intended positioning and differentiation
• Average perception of company's product quality relative to chief competitor
• Average perception of company's service quality relative to chief competitor

Marketing Insight

Marketing Dashboards to Improve Effectiveness and Efficiency

Marketing consultant Pat LaPointe sees marketing dashboards as providing all the up-to-the-minute information necessary to run the business operations for a company—such as sales versus forecast, distribution channel effectiveness, brand equity evolution, and human capital development. According to LaPointe, an effective dashboard will focus thinking, improve internal communications, and reveal where marketing investments are paying off and where they aren't.

LaPointe observes four common measurement "pathways" marketers are pursuing today (see △ Figure 4.2).

- The *customer metrics pathway* looks at how prospects become customers, from awareness to preference to trial to repeat purchase, or some less linear model. This area also examines how the customer experience contributes to the perception of value and competitive advantage.

- The *unit metrics pathway* reflects what marketers know about sales of product/service units—how much is sold by product line and/or by geography; the marketing cost per unit sold as an efficiency yardstick; and where and how margin is optimized in terms of characteristics of the product line or distribution channel.

|Fig. 4.2| △

Marketing
Measurement Pathway

Technically Sound but Ad-hoc Efforts Across Multiple Measurement Silos

Customer Metrics	Unit Metrics	Cash-Flow Metrics	Brand Metrics
Hierarchy of Effects	Product/Category Sales	Program and Campaign ROI	Brand Imagery & Attributes
Satisfaction/ Experience	Marketing Cost per Unit	Media Mix Models	Equity Drivers
Attitude/Behavior Segment Migration	Margin Optimization	Initiative Portfolio Optimization	Financial Valuation

100s of Reports but Very Little Knowledge Integration or Learning Synthesis

(continued)

|Fig. 4.3| △

Example of a Marketing Dashboard

Source: Adapted from Patrick LaPointe, *Marketing by the Dashboard Light—How to Get More Insight, Foresight, and Accountability from Your Marketing Investments.* © 2005, Patrick LaPointe.

- The *cash-flow metrics pathway* focuses on how well marketing expenditures are achieving short-term returns. Program and campaign ROI models measure the immediate impact or net present value of profits expected from a given investment.

- The *brand metrics pathway* tracks the development of the longer-term impact of marketing through brand equity measures that assess both the perceptual health of the brand from customer and prospective customer perspectives as well as the overall financial health of the brand.

LaPointe feels a marketing dashboard can present insights from all the pathways in a graphically related view that helps management see subtle links between them. A well-constructed dashboard can have a series of tabs that allow the user to toggle easily between different "families" of metrics organized by customer, product, experience, brand, channels, efficiency, organizational development, or macroenvironmental factors. Each tab presents the three or four most insightful metrics, with data filtered by business unit, geography, or customer segment based on the users' needs. (See Figure △ 4.3 for a sample brand metrics page.)

Ideally, the number of metrics presented in the marketing dashboard would be reduced to a handful of key drivers over time. Meanwhile, the process of developing and refining the marketing dashboard will undoubtedly raise and resolve many key questions about the business.

Source: Adapted from Pat LaPointe, *Marketing by the Dashboard Light*, Association of National Advertisers, 2005, www.MarketingNPV.com.

Summary

1. Companies can conduct their own marketing research or hire other companies to do it for them. Good marketing research is characterized by the scientific method, creativity, multiple research methods, accurate model building, cost-benefit analysis, healthy skepticism, and an ethical focus.

2. The marketing research process consists of defining the problem, decision alternatives; and research objectives; developing the research plan; collecting the information; analyzing the information; presenting the findings to management; and making the decision.

3. In conducting research, firms must decide whether to collect their own data or use data that already exist. They must also choose a research approach (observational, focus group, survey, behavioral data, or experimental) and research instruments (questionnaire, qualitative measures, or technological devices). In addition, they must decide on a sampling plan and contact methods (by mail, by phone, in person, or online).

4. Two complementary approaches to measuring marketing productivity are: (1) marketing metrics to assess marketing effects and (2) marketing-mix modeling to estimate causal relationships and measure how marketing activity affects outcomes. Marketing dashboards are a structured way to disseminate the insights gleaned from these two approaches within the organization.

Applications

Marketing Debate
What Is the Best Type of Marketing Research?

Many market researchers have their favorite research approaches or techniques, although different researchers often have different preferences. Some researchers maintain that the only way to really learn about consumers or brands is through in-depth, qualitative research. Others contend that the only legitimate and defensible form of marketing research uses quantitative measures.

Take a position: The best marketing research is quantitative in nature *versus* The best marketing research is qualitative in nature.

Marketing Discussion
Survey Quality

When was the last time you participated in a survey? How helpful do you think the information you provided was? How could the research have been done differently to make it more effective?

Marketing Excellence

>>IDEO

IDEO is the largest design consultancy firm in the United States. The company has created some of the most recognizable design icons of the technology age, including the first laptop computer, the first mouse (for Apple), the Palm V PDA, and the TiVo digital video recorder. Beyond its high-tech wizardry, the company has designed household items such as the Swiffer Sweeper and the Crest Neat Squeeze toothpaste tube, both for Procter & Gamble. IDEO's diverse roster of clients includes AT&T, Bank of America, Ford Motor Company, PepsiCo, Nike, Marriott, Caterpillar, Eli Lilly, Lufthansa, Prada, and the Mayo Clinic.

IDEO's success is predicated on an approach called "design thinking" based on a "human-centered methodology." The company strives to design products that consumers actively want because they offer a superior experience and solve a problem. In order to achieve these consumer-friendly solutions, IDEO tries to uncover deep insights through a variety of human-centered research methods. These studies help the firm better understand how consumers purchase, interact with, use, and even dispose of products. This customer-focused approach has run counter to the prevailing wisdom of many high-tech firms that focus more on their own capabilities when designing products. David Blakely, head of IDEO's technology group, explained, "Tech companies design from the inside out, whereas we design from the outside in so that we can put customers first."

IDEO employs a number of other observational methods to conduct "deep dives" into consumer behavior. The company's "human factors" team shadows consumers, takes pictures or videos of them during product purchase or use occasions, and conducts in-depth interviews with them to further evaluate their experiences. Another method is called "behavioral mapping," which creates a photographic log of people within a certain area like an airline departure lounge, a hospital waiting room, or a food court at a shopping mall over a period of days to gauge how the experience can be improved. A third method relies on "camera journals" that participants keep, in which they record their visual impressions of a given product or category. IDEO also invites consumers to use "storytelling" techniques to share personal narratives, videos, skits, or even animations about their experiences with a product or service.

Prototyping has also contributed to IDEO's success. It takes place throughout the design process so individuals can test out, experience, and improve upon each level of development. IDEO encourages its clients, even senior executives, to participate in the research so they get a sense of the actual consumer experience with their product or service. AT&T executives, for example, were sent on a scavenger hunt designed to test the company's location software for its mMode mobile phones. The executives soon realized the software was not user-friendly. One resorted to calling his wife so she could use Google to help him find an item on the list. IDEO helped AT&T redesign the interface to be more intuitive for the average user.

IDEO helped apparel-maker Warnaco improve sales by having its designers shadow eight women as they shopped for lingerie. The "shop-alongs" revealed that most consumers had a negative buying experience. They had difficulty locating the lingerie section in the department store and finding the right size in the overcrowded display, and they felt the fitting rooms were too small. IDEO developed a new six-stage merchandising environment that included larger fitting rooms, "concierges" to give shoppers information, and improved displays. Warnaco implemented this plan with the help of the department stores.

In another example, Marriott hired IDEO to help make its Courtyard by Marriott hotels more appealing to younger guests. IDEO conducted interviews and observed guests in the hotel's lounges, lobbies, and restaurants. Its research revealed that younger guests were turned off by the lack of activity in the hotel's public places, the lack of technology offered, and the poor food options. As a result, Courtyard by Marriott changed its furniture and decor to be more

warm, comfortable, and inviting. The hotel added advanced technology options throughout its lobbies and lounges, such as flat-screen TVs and free Wi-Fi. Marriott converted the breakfast buffets to 24/7 coffee-shop-style cafés, where guests can quickly grab a gourmet coffee drink and healthy bite to eat any time. And Courtyard created new outdoor hangout spots with sound speakers and fire pits. After the renovations, Courtyard by Marriott changed its tagline to "Courtyard. It's a New Stay."

IDEO's novel consumer-led approach to design has led to countless success stories and awards for its clients and for the firm itself. The most important result for IDEO's designs is that they solve a usability problem for clients. The company goes "broad and deep" to achieve this goal. Since its founding, it has been issued over 1,000 patents, and in 2008 the company generated $120 million in revenues.

Questions

1. Why has IDEO been so successful? What is the most difficult challenge it faces in conducting its research and designing its products?

2. In the end, IDEO creates great solutions for companies that then receive all the credit. Should IDEO try to create more brand awareness for itself? Why or why not?

Sources: Lisa Chamberlain, "Going off the Beaten Path for New Design Ideas," *New York Times*, March 12, 2006; Chris Taylor, "School of Bright Ideas," *Time*, March 6, 2005, p. A8; Scott Morrison, "Sharp Focus Gives Design Group the Edge," *Financial Times*, February 17, 2005, p. 8; Bruce Nussbaum, "The Power of Design," *BusinessWeek*, May 17, 2004, p. 86; Teressa Iezzi, "Innovate, But Do It for Consumers," *Advertising Age*, September 11, 2006; Barbara De Lollis, "Marriott Perks Up Courtyard with Edgier, More Social Style," *USA Today*, April 1, 2008; Tim Brown, "Change by Design," *BusinessWeek*, October 5, 2009, pp. 54–56.

Marketing Excellence

>>Intuit

Intuit develops and sells financial and tax solution software for consumers and small to medium-sized businesses. The company was founded in 1983 by a former Procter & Gamble employee, Scott Cook, and a Stanford University programmer, Tom Proulx, after Cook realized there

must be a better way to automate his bill-paying process. For over 25 years, Intuit's mission has been to "revolutionize people's lives by solving their important business and financial management problems."

Intuit launched its first product, Quicken, in 1984 and struggled to survive during those first years. After some favorable reviews in the trade journals and an effective print advertising campaign, the company got its first break. By 1988, Quicken was the best-selling finance product on the market. In 1992, the company launched QuickBooks, a bookkeeping and payroll software product for small businesses, and went public the following year.

Intuit grew quickly in the early 1990s, thanks to the success of Quicken, QuickBooks, and TurboTax, a tax preparation software program. Intuit's products did something for small businesses that more complicated

accounting packages didn't: they solved finance and tax problems in a simple, easy-to-use manner. Intuit had recognized correctly that simplicity was the key, not in-depth accounting analysis. By 1995, the firm held a 70 percent market share, and Microsoft tried to purchase it for $2 billion. However, the Justice Department blocked the deal as anticompetitive and the buyout collapsed.

From 1995 to 1997, Intuit's stock tumbled 72 percent and forced the company to refocus its strategic efforts. It turned to the growing power of the Internet, online banking capabilities, and valuable input from its customers to develop new product versions, which in turn improved the company's stock value and market position throughout the 2000s.

Intuit spends a significant amount of time and money—approximately 20 percent of net revenues—on consumer research each year. It is critical for Intuit to know exactly how customers use and feel about their products due to the fast-paced nature of technology, shifting consumer needs, and the competitiveness of its industry. Intuit conducts several levels of research and invites consumers and businesses to participate in a variety of ways.

During a *Site Visit,* Intuit researchers visit the individual's home or office to observe and learn exactly how its products are used and can be improved in the true work environment. A *Lab Study* invites consumers to one of Intuit's U.S. research labs to test out new products and ideas. During a *Remote Study*, consumers are interviewed over the phone and often asked to view new design concepts over the Internet. The company also conducts an ongoing extensive research study with the Institute for the Future, to learn more about the future trends affecting small businesses. Intuit uses what it learns not only to produce improved versions of its products each year, but also to better understand the next generation of financial and tax software, such as solutions for mobile devices.

Demand for Intuit's products is seasonal, and its marketing efforts are typically concentrated around tax preparation time—November through April. During that time, Intuit develops promotions with original equipment manufacturers (OEMs) and major retailers. It promotes its products through a number of marketing efforts including direct mail, Web marketing, print, radio, and television ads.

While Intuit's marketing campaigns have evolved over the years, it was clear early on that positive word of mouth and exceptional customer service are its most effective marketing tools. Harry Pforzheimer, chief communications officer and marketing leader, explained, "It's a little harder to measure but when you know that roughly eight out of 10 customers bought your product because of word-of-mouth that's a pretty powerful tool . . . So engaging with our customers directly is part of our DNA and communicating with customers on a timely basis is critical. And that timely basis now is instantaneous."

Recently, Intuit has increased its presence on social media Web sites such as Twitter, Facebook, and LinkedIn. Just 12 weeks after the firm integrated a small-business Web site with these social networks, sales of QuickBooks increased 57 percent. To measure the viral success of this site, Intuit identified bloggers who either wrote their own stories or picked up stories originally posted by a few influential bloggers who were given a special preview. Intuit classified each blog post according to *velocity* (whether it took a month or happened in a few days), *share of voice* (how much talk occurred in the blogosphere), *voice quality* (what was said and how positive or negative it was), and *sentiment* (how meaningful the comments were).

In 2008, Intuit earned $3.1 billion in revenue, primarily from Quicken, QuickBooks, and TurboTax sales. The company now employs over 8,000 people, mostly in the United States, and is planning to expand internationally. It continues to acquire companies, such as personal finance Web site Mint.com in 2009, that will help it in growth areas such as solutions for mobile devices. Intuit believes that expanding its mobile solutions will encourage younger consumers to turn to the company for their finance and tax software. Growth will also come from previous Microsoft Money customers. In 2009, Microsoft announced it would discontinue its Money product line after an 18-year battle with Quicken. The victory was a rare win against the software giant and one that should provide great opportunity for Intuit.

Questions

1. Elaborate on Intuit's use of customer research. Why did it work so well for the company?

2. Could anything go wrong for Intuit now that it has beaten out Microsoft? Why or why not?

3. How should Intuit gauge the results of its research among younger consumers with mobile devices?

Sources: Intuit, *2008 Annual Report*; Karen E. Klein, "The Face of Entrepreneurship in 2017," *BusinessWeek*, January 31, 2007; Intuit, "Intuit Study: Next-Gen Artisans Fuel New Entrepreneurial Economy," February 13, 2008; Michael Bush, "How PR Chiefs Have Shifted Toward Center of Marketing Departments," *Advertising Age,* September 21, 2009; Jon Swartz, "More Marketers Use Social Networking to Reach Customers," *USA Today,* August 28, 2009; Mark Johnson and Joe Sinfield, "Focusing on Consumer Needs Is Not Enough," *Advertising Age,* April 28, 2008; "Intuit CEO Sees Growth in Mobile, Global Markets," *Associated Press,* September 23, 2009.