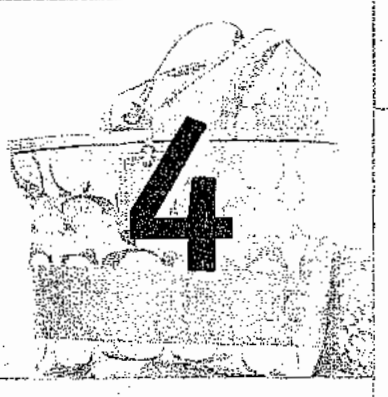
chapter 4



Managing Marketing Information

Previewing the Concepts

In the previous chapter, you learned about the complex and changing marketing environment. In this chapter, we'll continue our exploration of how marketers go about understanding the marketplace and consumers. We'll look at how companies develop and manage information about important marketplace elements—about customers, competitors, products, and marketing programs. We'll examine marketing information systems designed to give managers the right information, in the right form, at the right time to help them make better marketing decisions. We'll also take a close look at the marketing research process and at some special marketing research considerations. To succeed in today's marketplace, companies must know how to manage mountains of marketing information effectively.

We'll start the chapter with a story about Coach, a company long known for its classic, high-quality leather handbags and accessories. Until recently, Coach seemed to get along just fine in the mature and stable handbag industry without much consumer research. But when consumer needs and preferences shifted and sales slowed, all that changed. Read on to see how Coach used exhaustive marketing research to give itself an extreme strategic makeover.

Coach first opened its doors in 1941 as a family-owned, leather-goods workshop. Over the next 50 years, the company developed a strong following for its classically styled, high-quality leather handbags and accessories.

In those early years, it seemed, Coach didn't need a lot of marketing research to understand its customers. For most buyers, handbags were largely functional, used for carrying keys, a wallet, and cosmetics. Women typically bought only two purses a year—one for everyday use and one for special occasions. The everyday handbag lasted a long time and styles changed infrequently. Women didn't waste much time or energy on their purse-buying decisions.

Coach offered basic handbag designs in understated colors, black and brown. The classic Coach bag's only ornamentation was a small gold latch and a small leather tag embossed with the Coach name. Over the years, with their understated styling and quality image, Coach handbags earned a reputation as classy but "traditional sturdy standbys." Conservative professionals, who liked the look, quality, and value of Coach's handbags, became the company's loyal core customers. Coach, by then a unit of Sara Lee Corporation, cruised along comfortably.

By the mid-1990s, however, Coach's world had changed dramatically and sales started to slow. As more and more women entered the workforce, they needed different types of bags to carry their work and their laptops. These increasingly influential women fueled the "mass luxury movement." They wanted the designer brands that only affluent women had been able to afford. And they wanted more stylish and colorful bags to spruce up the plain fashions of the day.

High-end designers such as Prada, Fendi, Gucci, and Chanel were responding to these trends. According to one analyst, the industry saw "a sharp uptick in demand for handbags with extra flair, such as bright colors, exotic leathers, and even materials such as wool, velvet, and fur." Many of these designer bags sold for more than $1,000, some for as much as $3,000. By comparison, Coach's traditional styles began to look downright plain.

It was time for an extreme makeover. But where to start? To gain a better understanding of the new handbag buyer, Coach began with marketing research—lots of marketing research. "Coach started thinking like a consumer-products company," says the analyst, "relentlessly testing the market to see what holes it could fill."

Based on extensive marketing research, Coach overhauled its strategy. In the process, it helped engineer a shift in the way women shop for handbags.

[Coach] decided to translate the elite notion of the handbag as a fashion statement into something the average American woman could afford, [dubbing] the strategy "accessible luxury." Coach [now] creates and markets new kinds of bags to fill what it calls "usage voids," activities that range from weekend getaways to dancing at nightclubs to trips to the grocery store. . . . Known for decades as a sturdy purveyor of conservative, long-lasting handbags, it has [now] successfully convinced women to buy weekend bags, evening bags, backpacks, satchels, clutches, totes, briefcases, diaper bags, coin purses, duffels, and a *mini*handbag that doubles as a bag-within-a-bag ... [Coach now] updates its collections nearly every month with new colors, fabrics, and sizes. It prices bags lower than luxury designers but high enough for women to buy as a special treat.

As a starter, consumer research revealed that even Coach's conservative customers wanted more fashion pizzazz in their handbags. So, in early 2001, the company launched the "Signature" collection, stylish and colorful bags made of leather and fabric and covered in the letter *C*. Coach designers even began to use adjectives such as *sexy, fun, sophisticated, playful, grounded, luxurious,* and *quality driven* to describe Coach's customers and the company itself.

About that same time, research revealed another "usage void." Women were carrying small Coach cosmetic cases inside their larger handbags to hold essentials—such as keys, credit cards, and even cell phones—making them easier to find. However, when crammed into larger bags, these smaller cases caused bulges, making the larger bags appear misshapen and bulky. To fill the void, Coach designed a four-inch by six-inch zippered bag with a looped strap, which a woman could either dangle from her wrist or clip inside a larger bag. Coach called the new product the "wristlet" and introduced it at prices as low as $38. In only the first 10 months, women snapped up more than 100,000 wristlets. By 2004, Coach was selling more than a million wristlets a year in 75 styles.

Still more research revealed additional usage voids. For example, Coach's consumer researchers learned that women were increasingly interested in nonleather bags. They also faced the problem that customers did most of their handbag shopping only during the holiday season. To fill both voids, the company developed its

Objectives

After studying this chapter, you should be able to:

1. explain the importance of information to the company and its understanding of the marketplace
2. define the marketing information system and discuss its parts
3. outline the steps in the marketing research process
4. explain how companies analyze and distribute marketing information
5. discuss the special issues some marketing researchers face, including public policy and ethics issues

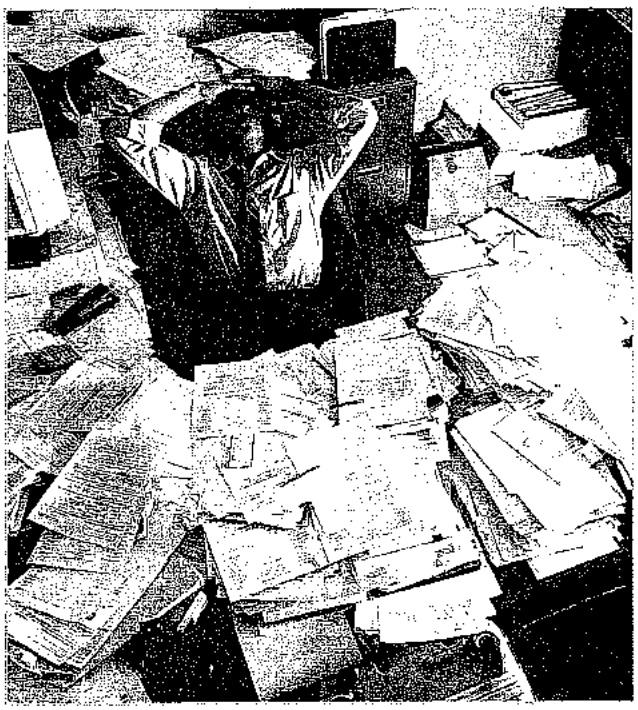
"Hamptons Weekend" line, stylish fabric bags designed for summer weekend use. Unlike competitors' uninspired black nylon or basic canvas bags, the new Coach line featured an easily foldable shape, hot colors, and a durable, water-resistant material befitting a "relaxed-but-sophisticated" lifestyle. The new bags flew off the shelves at Coach's retail stores.

Now, Coach thinks that its research points to yet another market void. Researchers noticed that more women are now mixing formal clothing, stilettos, and diamonds with blue jeans and other casual clothes. This suggests an opportunity to get women to use formal accessories—including evening bags—during daylight hours. So Coach has introduced the "Madison" collection, sleek satin or bejeweled versions of its more traditional purses. Ads for the line show a casually dressed woman carrying a Madison bag in daylight, while also carrying a larger, casual tote bag. Coach also plans to offer a line of jewelry and is looking to add fragrances.

Thus, Coach watches its customers closely, looking for trends that might suggest new market voids to fill. Last year alone, Coach spent $3 million on marketing research, interviewing 14,000 women about everything from lifestyles to purse styles to strap lengths. According to a Coach executive, everything Coach does is thoroughly "girlfriend tested, down to the last stitch."

Such exhaustive marketing research has more than paid for itself. The company's sales, profits, and share prices are now soaring. Coach has achieved double-digit sales and earnings growth every period since spinning off from Sara Lee and going public in 2000. Over the past five years, sales are up over 177 percent and profits have increased sixfold. It looks like investors are going to need bigger purses.[1]

In order to produce superior customer value and satisfaction, companies need information at almost every turn. As the Coach story highlights, good products and marketing programs begin with solid information on consumer needs and wants. Companies also need an abundance of information on competitors, resellers, and other actors and forces in the marketplace.



Information overload: "In this oh-so-overwhelming information age, it's all too easy to be buried, burdened, and burned out by data overload."

With the recent explosion of information technologies, companies can now generate information in great quantities. For example, Wal-Mart maintains a huge database that can provide deep insights for marketing decisions. A few years ago, as Hurricane Ivan roared toward the Florida coast, reports one observer, the giant retailer "knew exactly what to rush onto the shelves of stores in the hurricane's path—strawberry Pop Tarts. By analyzing years of sales data from just prior to other hurricanes, [Wal-Mart] figured out that shoppers would stock up on Pop Tarts—which don't require refrigeration or cooking."[2]

In fact, today's managers often receive too much information. For example, Wal-Mart refreshes sales data from check-out scanners hourly, adding a billion rows of data a day, equivalent to about 96,000 DVD movies. That's a *lot* of data to analyze. Thus, running out of information is not a problem, but seeing through the "data smog" is. "In this oh-so-overwhelming Information Age," comments one observer, "it's all too easy to be buried, burdened, and burned out by data overload."[3]

Despite this data glut, marketers frequently complain that they lack enough information of the right kind. They don't need *more* information, they need *better* information. And they need to make better *use* of the information they already have. A former CEO at Unilever once said that if Unilever only knew what it knows, it would double its profits.[4] The meaning is clear: Many companies sit on rich information but fail

to manage and use it well. Companies must design effective marketing information systems that give managers the right information, in the right form, at the right time to help them make better marketing decisions.

Marketing information system (MIS)
People, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers.

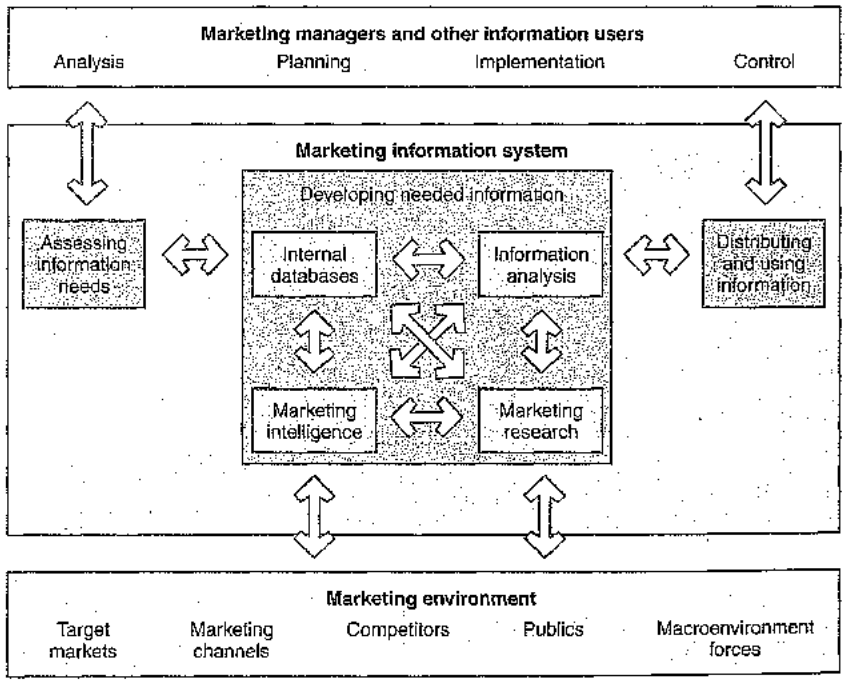
A **marketing information system (MIS)** consists of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers. Figure 4.1 shows that the MIS begins and ends with information users—marketing managers, internal and external partners, and others who need marketing information. First, it interacts with these information users to *assess information needs*. Next, it *develops needed information* from internal company databases, marketing intelligence activities, and marketing research. Then it helps users to analyze information to put it in the right form for making marketing decisions and managing customer relationships. Finally, the MIS *distributes* the marketing information and helps managers *use* it in their decision making.

Assessing Marketing Information Needs

The marketing information system primarily serves the company's marketing and other managers. However, it may also provide information to external partners, such as suppliers, resellers, or marketing services agencies. For example, Wal-Mart gives key suppliers access to information on customer buying patterns and inventory levels. And Dell creates tailored Premium Pages for large customers, giving them access to product design, order status, and product support and service information. In designing an information system, the company must consider the needs of all of these users.

A good marketing information system balances the information users would *like* to have against what they really *need* and what is *feasible* to offer. The company begins by interviewing managers to find out what information they would like. Some managers will ask for whatever information they can get without thinking carefully about what they really need. Too much information can be as harmful as too little. Other managers may omit things they ought to know, or they may not know to ask for some types of information they should have. For example, managers might need to know about a new product that a competitor plans to introduce during the coming year. Because they do not know about the new product, they do not think to ask about it. The MIS must monitor the marketing environment in order to provide decision makers with information they should have to make key marketing decisions.

FIGURE 4.1
The marketing information system



Sometimes the company cannot provide the needed information, either because it is not available or because of MIS limitations. For example, a brand manager might want to know how competitors will change their advertising budgets next year and how these changes will affect industry market shares. The information on planned budgets probably is not available. Even if it is, the company's MIS may not be advanced enough to forecast resulting changes in market shares.

Finally, the costs of obtaining, processing, storing, and delivering information can mount quickly. The company must decide whether the benefits of having additional information are worth the costs of providing it, and both value and cost are often hard to assess. By itself, information has no worth; its value comes from its use. In many cases, additional information will do little to change or improve a manager's decision, or the costs of the information may exceed the returns from the improved decision. Marketers should not assume that additional information will always be worth obtaining. Rather, they should weigh carefully the costs of getting more information against the benefits resulting from it.

Developing Marketing Information

Marketers can obtain the needed information from *internal data*, *marketing intelligence*, and *marketing research*.

Internal Data

Internal databases
Electronic collections of consumer and market information obtained from data sources within the company network.

Many companies build extensive **internal databases**, electronic collections of consumer and market information obtained from data sources within the company network. Marketing managers can readily access and work with information in the database to identify marketing opportunities and problems, plan programs, and evaluate performance.

Information in the database can come from many sources. The accounting department prepares financial statements and keeps detailed records of sales, costs, and cash flows. Operations reports on production schedules, shipments, and inventories. The marketing department furnishes information on customer transactions, demographics, psychographics, and buying behavior. The customer service department keeps records of customer satisfaction or service problems. The sales force reports on reseller reactions and competitor activities, and marketing channel partners provide data on point-of-sale transactions. Harnessing such information can provide a powerful competitive advantage.

Internal databases: Pizza Hut can slice and dice its extensive customer database by favorite toppings, what you ordered last, and whether you buy a salad with your cheese and pepperoni pizza, targeting coupon offers to specific households based on past buying behaviors and preferences.

Here is an example of how one company uses its internal database to make better marketing decisions:

> Pizza Hut claims to have the largest fast-food customer database in the world. The database contains detailed customer information data on 40 million U.S. households, gleaned from phone orders, online orders, and point-of-sale transactions at its more than 7,500 restaurants around the nation. The company can slice and dice the data by favorite toppings, what you ordered last, and whether you buy a salad with your cheese and pepperoni pizza. Pizza Hut also tracks in real time what commercials people are watching and responding to. It then uses all this data to enhance customer relationships. For example, it can target coupon offers to specific households based on past buying behaviors and preferences.[5]

Internal databases usually can be accessed more quickly and cheaply than other information sources, but they also present some problems. Because internal information was often collected for other purposes, it may be incomplete or in the wrong form for making marketing decisions. For example, sales and cost data used by the accounting department for preparing financial statements must be adapted for use in evaluating the value of specific customer segment, sales force, or channel performance. Data also ages quickly; keeping the database current requires a major effort. In addition, a large company produces mountains of information, which must be well integrated and readily accessible so that managers can find it easily and use it effectively. Managing that much data requires highly sophisticated equipment and techniques.

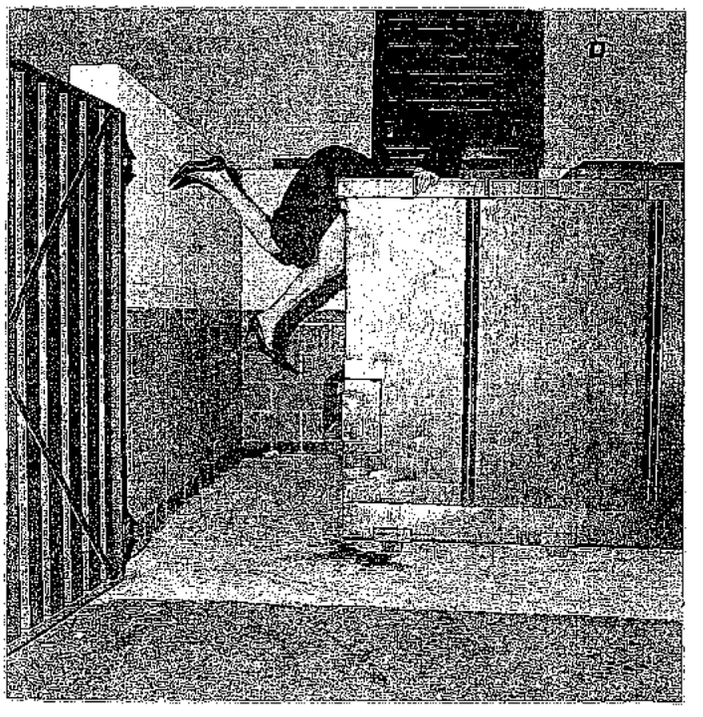
Marketing Intelligence

Marketing intelligence
The systematic collection and analysis of publicly available information about competitors and developments in the marketing environment.

Marketing intelligence is the systematic collection and analysis of publicly available information about competitors and developments in the marketplace. The goal of marketing intelligence is to improve strategic decision making, assess and track competitors' actions, and provide early warning of opportunities and threats.

Competitive intelligence gathering has grown dramatically as more and more companies are now busily snooping on their competitors. Techniques range from quizzing the company's own employees and benchmarking competitors' products to researching the Internet, lurking around industry trade shows, and even rooting through rivals' trash bins.

Much intelligence can be collected from people inside the company—executives, engineers and scientists, purchasing agents, and the sales force. The company can also obtain important intelligence information from suppliers, resellers, and key customers. Or it can get good information by observing competitors and monitoring their published information. It can buy and analyze competitors' products, monitor their sales, check for new patents, and examine various types of physical evidence. For example, one company regularly checks out competitors' parking lots—full lots might indicate plenty of work and prosperity; half-full lots might suggest hard times.



Marketing Intelligence: Procter & Gamble admitted to "dumpster diving" at rival Unilever's Helene Curtis headquarters. When P&G's top management learned of the questionable practice, it stopped the project, voluntarily informed Unilever, and set up talks to right whatever competitive wrongs had been done.

Some companies have even rifled their competitors' garbage, which is legally considered abandoned property once it leaves the premises. In one elaborate garbage-snatching incident, AirCanada was recently caught rifling through rival WestJet's dumpsters in efforts to find evidence that WestJet was illegally tapping into Air Canada's computers.[6] In another case, Procter & Gamble admitted to "dumpster diving" at rival Unilever's headquarters. "P&G got its mitts on just about every iota of info there was to be had about Unilever's [hair-care] brands," notes an analyst. However, when news of the questionable tactics reached top P&G managers, they were shocked. They immediately stopped the project and voluntarily set up negotiations with Unilever to right whatever competitive wrongs had been done. Although P&G claims it broke no laws, the company reported that the dumpster raids "violated our strict guidelines regarding our business policies."[7]

Competitors often reveal intelligence information through their annual reports, business publications, trade show exhibits, press releases, advertisements, and Web pages. The Internet is proving to be a vast new source of competitor-supplied information. Using Internet search engines, marketers can search specific competitor names, events, or trends and see what turns up. Moreover, most companies now place volumes of information on their Web sites, providing details to attract customers, partners,

suppliers, investors, or franchisees. This can provide a wealth of useful information about competitors' strategies, markets, new products, facilities, and other happenings.

Something as simple as a competitor's job postings can be very revealing. For example, a few years back, while poking around on Google's company Web site, Microsoft's Bill Gates came across a help-wanted page describing all of the jobs available at Google. To his surprise, he noted that Google was looking for engineers with backgrounds that had nothing to do with its Web-search business but everything to do with Microsoft's core software businesses. Forewarned that Google might be preparing to become more than just a search engine company, Gates emailed a handful of Microsoft executives, saying, in effect, "We have to watch these guys. It looks like they are building something to compete with us." Notes a marketing intelligence consultant, companies "are often surprised that there's so much out there to know. They're busy with their day-to-day operations and they don't realize how much information can be obtained with a few strategic keystrokes."[8]

Intelligence seekers can also pore through any of thousands of online databases. Some are free. For example, the U.S. Security and Exchange Commission's database provides a huge stockpile of financial information on public competitors, and the U.S. Patent Office and Trademark database reveals patents competitors have filed. And for a fee, companies can subscribe to any of the more than 3,000 online databases and information search services such as Dialog, Hoover's, DataStar, LexisNexis, Dow Jones News Retrieval, ProQuest, and Dun & Bradstreet's Online Access.

The intelligence game goes both ways. Facing determined marketing intelligence efforts by competitors, most companies are now taking steps to protect their own information. For example, Unilever conducts widespread competitive intelligence training. Employees are taught not just how to collect intelligence information but also how to protect company information from competitors. According to a former Unilever staffer, "We were even warned that spies from competitors could be posing as drivers at the minicab company we used." Unilever even performs random checks on internal security. Says the former staffer, "At one [internal marketing] conference, we were set up when an actor was employed to infiltrate the group. The idea was to see who spoke to him, how much they told him, and how long it took to realize that no one knew him. He ended up being there for a long time."[9]

The growing use of marketing intelligence raises a number of ethical issues. Although most of the preceding techniques are legal, and some are considered to be shrewdly competitive, some may involve questionable ethics. Clearly, companies should take advantage of publicly available information. However, they should not stoop to snoop. With all the legitimate intelligence sources now available, a company does not need to break the law or accepted codes of ethics to get good intelligence.

Marketing Research

In addition to information about competitor and marketplace happenings, marketers often need formal studies of specific situations. For example, Budweiser wants to know what appeals will be most effective in its Super Bowl advertising. Or Samsung wants to know how many and what kinds of people will buy its next-generation plasma televisions. In such situations, marketing intelligence will not provide the detailed information needed. Managers will need marketing research.

Marketing research
The systematic design, collection, analysis, and reporting of data relevant to a specific marketing situation facing an organization.

Marketing research is the systematic design, collection, analysis, and reporting of data relevant to a specific marketing situation facing an organization. Companies use marketing research in a wide variety of situations. For example, marketing research can help marketers understand customer satisfaction and purchase behavior. It can help them to assess market potential and market share or to measure the effectiveness of pricing, product, distribution, and promotion activities.

Some large companies have their own research departments that work with marketing managers on marketing research projects. This is how Procter & Gamble, Kraft, Citigroup, and many other corporate giants handle marketing research. In addition, these companies—like their smaller counterparts—frequently hire outside research specialists to consult with management on specific marketing problems and conduct marketing research studies. Sometimes firms simply purchase data collected by outside firms to aid in their decision making.

The marketing research process has four steps (see Figure 4.2): defining the problem and research objectives, developing the research plan, implementing the research plan, and interpreting and reporting the findings.

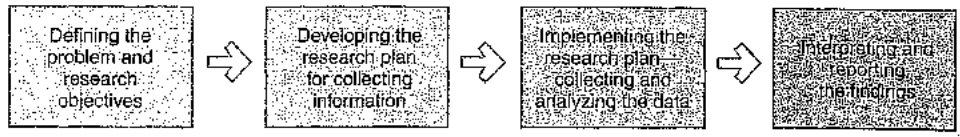


FIGURE 4.2 The marketing research process

Defining the Problem and Research Objectives

Marketing managers and researchers must work closely together to define the problem and agree on research objectives. The manager best understands the decision for which information is needed; the researcher best understands marketing research and how to obtain the information. Defining the problem and research objectives is often the hardest step in the research process. The manager may know that something is wrong, without knowing the specific causes.

After the problem has been defined carefully, the manager and researcher must set the research objectives. A marketing research project might have one of three types of objectives. The objective of **exploratory research** is to gather preliminary information that will help define the problem and suggest hypotheses. The objective of **descriptive research** is to describe things, such as the market potential for a product or the demographics and attitudes of consumers who buy the product. The objective of **causal research** is to test hypotheses about cause-and-effect relationships. For example, would a 10 percent decrease in tuition at a private college result in an enrollment increase sufficient to offset the reduced tuition? Managers often start with exploratory research and later follow with descriptive or causal research.

Exploratory research
Marketing research to gather preliminary information that will help define problems and suggest hypotheses.

Descriptive research
Marketing research to better describe marketing problems, situations, or markets, such as the market potential for a product or the demographics and attitudes of consumers.

Causal research
Marketing research to test hypotheses about cause-and-effect relationships.

The statement of the problem and research objectives guides the entire research process. The manager and researcher should put the statement in writing to be certain that they agree on the purpose and expected results of the research.

Developing the Research Plan

Once the research problems and objectives have been defined, researchers must determine the exact information needed, develop a plan for gathering it efficiently, and present the plan to management. The research plan outlines sources of existing data and spells out the specific research approaches, contact methods, sampling plans, and instruments that researchers will use to gather new data.

Research objectives must be translated into specific information needs. For example, suppose Campbell Soup Company decides to conduct research on how consumers would react to the introduction of new heat-and-go microwavable cups for its Campbell's SpaghettiOs. Such packaging has been successful for Campbell's soups—including its Soup at Hand line of hand-held, shippable soups and its Chunky and Select soup line in microwavable bowls, dubbed "M'm! M'm! Good! To Go!" The containers would cost more but would allow consumers to heat their SpaghettiOs in a microwave oven and to eat them without using dishes. This research might call for the following specific information:

- The demographic, economic, and lifestyle characteristics of current SpaghettiOs users. (Busy working couples might find the convenience of the new packaging worth the price; families with children might want to pay less and wash the bowls.)
- Consumer-usage patterns for SpaghettiOs and related products: how much they eat, where, and when. (The new packaging might be ideal for adults eating lunch on the go, but less convenient for parents feeding lunch to several children.)
- Retailer reactions to the new packaging. (Failure to get retailer support could hurt sales of the new package.)
- Forecasts of sales of both new and current packages. (Will the new packaging create new sales or simply take sales from the current packaging? Will the package increase Campbell's profits?)

Campbell managers will need these and many other types of information to decide whether to introduce the new packaging.

The research plan should be presented in a *written proposal*. A written proposal is especially important when the research project is large and complex or when an outside firm carries it out. The proposal should cover the management problems addressed and the research objectives, the information to be obtained, and the way the results will help management decision making. The proposal also should include research costs.

Secondary data
Information that already exists somewhere, having been collected for another purpose.

Primary data
Information collected for the specific purpose at hand.

To meet the manager's information needs, the research plan can call for gathering secondary data, primary data, or both. **Secondary data** consist of information that already exists somewhere, having been collected for another purpose. **Primary data** consist of information collected for the specific purpose at hand.

Gathering Secondary Data

Researchers usually start by gathering secondary data. The company's internal database provides a good starting point. However, the company can also tap a wide assortment of external information sources, including commercial data services and government sources (see Table 4.1).

Companies can buy secondary data reports from outside suppliers. For example, ACNielsen sells buyer data from a panel of 125,000 households in two dozen countries, with measures of trial and repeat purchasing, brand loyalty, and buyer demographics. Simmons sells information on more than 8,000 brands in 460 product categories, including detailed consumer profiles that assess everything from the products consumers buy and the brands they prefer, to

TABLE 4.1 Selected External Information Sources

For business data:

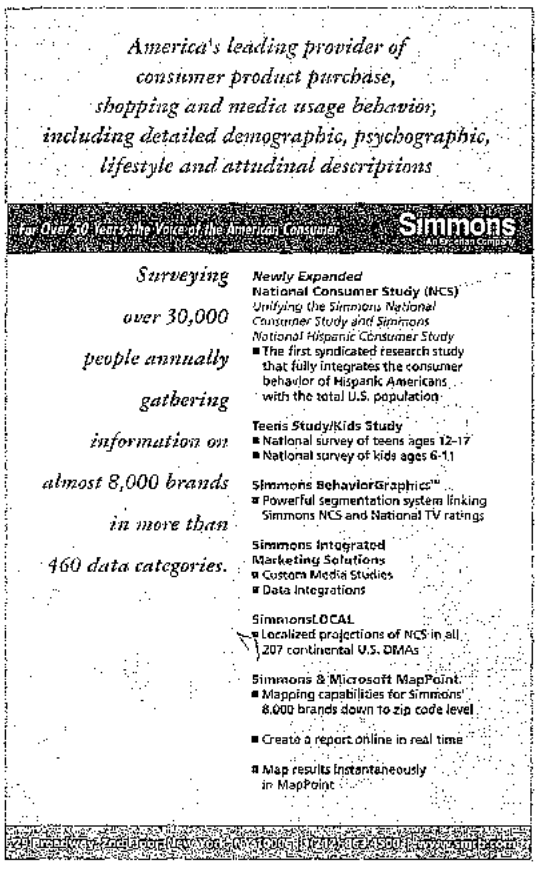
ACNielsen Corporation (www.acnielsen.com) provides supermarket scanner data on sales, market share, and retail prices; data on household purchasing; and data on television audiences (a unit of VNU NV).
Information Resources, Inc. (www.infores.com) provides supermarket scanner data for tracking grocery product movement and new product purchasing data.
Arbitron (www.arbitron.com) provides local-market and Internet radio audience and advertising expenditure information, among other media and ad spending data.
J.D. Power and Associates (www.jdpower.com) provides information from independent consumer surveys of product and service quality, customer satisfaction, and buyer behavior.
IMS Health (www.imshealth.com) tracks drug sales, monitors performance of pharmaceutical sales representatives, and offers pharmaceutical market forecasts.
Simmons Market Research Bureau (www.smrb.com) provides detailed analysis of consumer patterns in 400 product categories in selected markets.
Dun & Bradstreet (www.dnb.com) maintains a database containing information on more than 50 million individual companies around the globe.
comScore Networks (www.comscore.com) provides consumer behavior information and geodemographic analysis of Internet and digital media users around the world.
Thomson Dialog (www.dialog.com) offers access to more than 900 databases containing publications, reports, newsletters, and directories covering dozens of industries.
LexisNexis (www.lexisnexis.com) features articles from business, consumer, and marketing publications plus tracking of firms, industries, trends, and promotion techniques.
Factiva (www.factiva.com) specializes in in-depth financial, historical, and operational information on public and private companies.
Hoover's, Inc. (www.hoovers.com) provides business descriptions, financial overviews, and news about major companies around the world.
CNN (www.cnn.com) reports U.S. and global news and covers the markets and news-making companies in detail.
American Demographics (www.demographics.com) reports on demographic trends and their significance for businesses.

For government data:

Securities and Exchange Commission Edgar database (www.sec.gov) provides financial data on U.S. public corporations.
Small Business Administration (www.sba.gov) features information and links for small business owners.
Federal Trade Commission (www.ftc.gov) shows regulations and decisions related to consumer protection and antitrust laws.
Stat-USA (www.stat-usa.gov), a Department of Commerce site, highlights statistics on U.S. business and international trade.
U.S. Census (www.census.gov) provides detailed statistics and trends about the U.S. population.
U.S. Patent and Trademark Office (www.uspto.gov) allows searches to determine who has filed for trademarks and patents.

For Internet data:

ClickZ Stats/CyberAtlas (www.clickz.com/stats) brings together a wealth of information about the Internet and its users, from consumers to e-commerce.
Interactive Advertising Bureau (www.iab.net) covers statistics about advertising on the Internet.
Jupiter Research (www.jupiterresearch.com) monitors Web traffic and ranks the most popular sites.



Commercial database services such as Simmons sell an incredible wealth of information on everything from the products consumers buy and the brands they prefer to their lifestyles, attitudes, and media preferences. Simmons is "the voice of the American consumer."

their lifestyles, attitudes, and media preferences. The *Monitor* service by Yankelovich sells information on important social and lifestyle trends. These and other firms supply high-quality data to suit a wide variety of marketing information needs.[10]

Using commercial **online databases**, marketing researchers can conduct their own searches of secondary data sources. General database services such as Dialog, ProQuest, and LexisNexis put an incredible wealth of information at the keyboards of marketing decision makers. Beyond commercial Web sites offering information for a fee, almost every industry association, government agency, business publication, and news medium offers free information to those tenacious enough to find their Web sites. There are so many Web sites offering data that finding the right ones can become an almost overwhelming task.

Secondary data can usually be obtained more quickly and at a lower cost than primary data. Also, secondary sources can sometimes provide data an individual company cannot collect on its own—information that either is not directly available or would be too expensive to collect. For example, it would be too expensive for Campbell to conduct a continuing retail store audit to find out about the market shares, prices, and displays of competitors' brands. But it can buy the InfoScan service from Information Resources, Inc., which provides this information based on scanner and other data from 34,000 supermarkets in markets around the nation.

Secondary data can also present problems. The needed information may not exist—researchers can rarely obtain all the data they need from secondary sources. For example, Campbell will not find existing information about consumer reactions to new packaging that it has not yet placed on the market. Even when data can be found, they might not be very usable. The researcher must evaluate secondary information carefully to make certain it is *relevant* (fits research project needs), *accurate* (reliably collected and reported), *current* (up-to-date enough for current decisions), and *impartial* (objectively collected and reported).

Online databases
Computerized collections of information available from online commercial sources or via the Internet.

Primary Data Collection

Secondary data provide a good starting point for research and often help to define research problems and objectives. In most cases, however, the company must also collect primary data. Just as researchers must carefully evaluate the quality of secondary information, they also must take great care when collecting primary data. They need to make sure that it will be relevant, accurate, current, and unbiased. Table 4.2 shows that designing a plan for primary data collection calls for a number of decisions on *research approaches, contact methods, sampling plan,* and *research instruments.*

Research Approaches

Research approaches for gathering primary data include observation, surveys, and experiments. Here, we discuss each one in turn.

TABLE 4.2
Planning Primary Data Collection

Research Approaches	*Contact Methods*	*Sampling Plan*	*Research Instruments*
Observation	Mail	Sampling unit	Questionnaire
Survey	Telephone	Sample size	Mechanical instruments
Experiment	Personal	Sampling procedure	
	Online		

Observational research
The gathering of primary data by observing relevant people, actions, and situations.

Observational research involves gathering primary data by observing relevant people, actions, and situations. For example, a bank might evaluate possible new branch locations by checking traffic patterns, neighborhood conditions, and the location of competing branches.

Researchers often observe consumer behavior to glean insights they can't obtain by simply asking customers questions. For instance, Fisher-Price has set up an observation lab in which it can observe the reactions of little tots to new toys. The Fisher-Price Play Lab is a sunny, toy-strewn space where lucky kids get to test Fisher-Price prototypes, under the watchful eyes of designers who hope to learn what will get kids worked up into a new-toy frenzy. And Kimberly-Clark invented a new way to observe behavior through the eyes of consumers:[11]

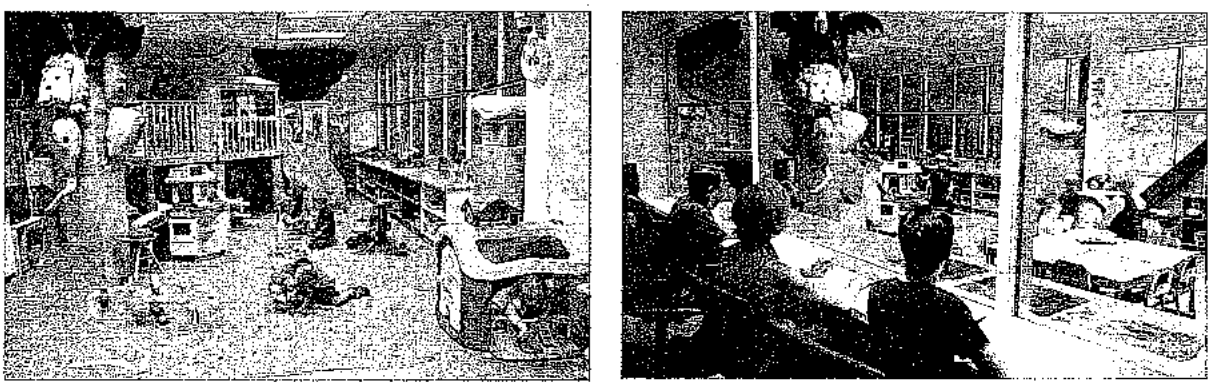
> A few years back, Kimberly-Clark saw sales of its Huggies baby wipes slip just as the company was preparing to launch a line of Huggies baby lotions and bath products. When traditional research didn't yield any compelling insights, K-C's marketers decided they could get more useful feedback just from watching customers' daily lives. They came up with camera-equipped "glasses" to be worn by consumers at home, so that researchers could see what they saw. It didn't take long to spot the problems—and the opportunities. Although women in focus groups talked about changing babies at a diaper table, the truth was they changed them on beds, floors, and on top of washing machines in awkward positions. The researchers could see they were struggling with wipe containers and lotions requiring two hands. So the company redesigned the wipe package with a push-button one-handed dispenser and designed lotion and shampoo bottles that can be grabbed and dispensed easily with one hand.

Observational research can obtain information that people are unwilling or unable to provide. In some cases, observation may be the only way to obtain the needed information. In contrast, some things simply cannot be observed, such as feelings, attitudes and motives, or private behavior. Long-term or infrequent behavior is also difficult to observe. Because of these limitations, researchers often use observation along with other data collection methods.

Ethnographic research
A form of observational research that involves sending trained observers to watch and interact with consumers in their "natural habitat."

A wide range of companies now use **ethnographic research**. Ethnographic research involves sending trained observers to watch and interact with consumers in their "natural habitat." Consider this example:[12]

> Marriott hired design firm IDEO to help it take a fresh look at business travel and to rethink the hotel experience for an increasingly important customer: the young, tech-savvy road warrior. Rather than doing the usual customer surveys or focus group research, IDEO dispatched a team of consultants, including a designer, anthropologist, writer, and architect, on a six-week trip to mingle with customers and get an up-close and personal view of them. Covering 12 cities, the group hung out in hotel lobbies, cafes, and bars and asked guests to graph what they were doing hour by hour.
>
> By "living with the natives," they learned that hotels are not generally good at serving small groups of business travelers. Hotel lobbies tend to be dark and better suited



Observational research: Fisher-Price set up an observation lab in which it could observe the reactions of little tots to new toys.

to killing time than conducting casual business. Marriott lacked places where guests could comfortably combine work with pleasure outside their rooms. One IDEO consultant recalls watching a female business traveler drinking wine in the lobby while trying not to spill it on papers spread out on a desk. "There are very few hotel services that address [such] problems," he says. The result: Marriott is reinventing the lobbies of its Marriott and Renaissance Hotels, creating a "social zone," with small tables, brighter lights, and wireless Web access, that is better suited to meetings. Another area will allow solo travelers to work or unwind in larger, quiet, semiprivate spaces where they won't have to worry about spilling coffee on their laptops or papers.

Ethnographic research often yields the kinds of details that just don't emerge from traditional research questionnaires or focus groups. "The beauty of ethnography," says a research expert, "is that it provides a richer understanding of consumers than does traditional research. Yes, companies are still using focus groups, surveys, and demographic data to glean insights into the consumer's mind. But closely observing people where they live and work . . . allows companies to zero in on their customers' unarticulated desires."[13]

Survey research
Gathering primary data by asking people questions about their knowledge, attitudes, preferences, and buying behavior.

Survey research, the most widely used method for primary data collection, is the approach best suited for gathering *descriptive* information. A company that wants to know about people's knowledge, attitudes, preferences, or buying behavior can often find out by asking them directly.

The major advantage of survey research is its flexibility—it can be used to obtain many different kinds of information in many different situations. However, survey research also presents some problems. Sometimes people are unable to answer survey questions because they cannot remember or have never thought about what they do and why. People may be unwilling to respond to unknown interviewers or about things they consider private. Respondents may answer survey questions even when they do not know the answer in order to appear smarter or more informed. Or they may try to help the interviewer by giving pleasing answers. Finally, busy people may not take the time, or they might resent the intrusion into their privacy.

Experimental research
Gathering primary data by selecting matched groups of subjects, giving them different treatments, controlling related factors, and checking for differences in group responses.

Whereas observation is best suited for exploratory research and surveys for descriptive research, **experimental research** is best suited for gathering *causal* information. Experiments involve selecting matched groups of subjects, giving them different treatments, controlling unrelated factors, and checking for differences in group responses. Thus, experimental research tries to explain cause-and-effect relationships.

For example, before adding a new sandwich to its menu, McDonald's might use experiments to test the effects on sales of two different prices it might charge. It could introduce the new sandwich at one price in one city and at another price in another city. If the cities are similar, and if all other marketing efforts for the sandwich are the same, then differences in sales in the two cities could be related to the price charged.

Contact Methods

Information can be collected by mail, telephone, personal interview, or online. Table 4.3 shows the strengths and weaknesses of each of these contact methods.

TABLE 4.3
Strengths and Weaknesses of Contact Methods

	Mail	*Telephone*	*Personal*	*Online*
Flexibility	Poor	Good	Excellent	Good
Quantity of data that can be collected	Good	Fair	Excellent	Good
Control of interviewer effects	Excellent	Fair	Poor	Fair
Control of sample	Fair	Excellent	Good	Excellent
Speed of data collection	Poor	Excellent	Good	Excellent
Response rate	Fair	Good	Good	Good
Cost	Good	Fair	Poor	Excellent

Source: Adapted with permission of the authors, Donald S. Tull and Del I. Hawkins, *Marketing Research: Measurement and Method,* 7th ed. (New York: Macmillan Publishing Company, 1993).

Mail questionnaires can be used to collect large amounts of information at a low cost per respondent. Respondents may give more honest answers to more personal questions on a mail questionnaire than to an unknown interviewer in person or over the phone. Also, no interviewer is involved to bias the respondent's answers.

However, mail questionnaires are not very flexible—all respondents answer the same questions in a fixed order. Mail surveys usually take longer to complete, and the response rate—the number of people returning completed questionnaires—is often very low. Finally, the researcher often has little control over the mail questionnaire sample. Even with a good mailing list, it is hard to control *who* at the mailing address fills out the questionnaire.

Telephone interviewing is the one of the best methods for gathering information quickly, and it provides greater flexibility than mail questionnaires. Interviewers can explain difficult questions and, depending on the answers they receive, skip some questions or probe on others. Response rates tend to be higher than with mail questionnaires, and interviewers can ask to speak to respondents with the desired characteristics or even by name.

However, with telephone interviewing, the cost per respondent is higher than with mail questionnaires. Also, people may not want to discuss personal questions with an interviewer. The method introduces interviewer bias—the way interviewers talk, how they ask questions, and other differences may affect respondents' answers. Finally, different interviewers may interpret and record responses differently, and under time pressures some interviewers might even cheat by recording answers without asking questions.

Personal interviewing takes two forms—individual and group interviewing. *Individual interviewing* involves talking with people in their homes or offices, on the street, or in shopping malls. Such interviewing is flexible. Trained interviewers can guide interviews, explain difficult questions, and explore issues as the situation requires. They can show subjects actual products, advertisements, or packages and observe reactions and behavior. However, individual personal interviews may cost three to four times as much as telephone interviews.

Group interviewing consists of inviting six to ten people to meet with a trained moderator to talk about a product, service, or organization. Participants normally are paid a small sum for attending. The moderator encourages free and easy discussion, hoping that group interactions will bring out actual feelings and thoughts. At the same time, the moderator "focuses" the discussion—hence the name **focus group interviewing**.

Focus group interviewing
Personal interviewing that involves inviting six to ten people to gather for a few hours with a trained interviewer to talk about a product, service, or organization. The interviewer "focuses" the group discussion on important issues.

Researchers and marketers watch the focus group discussions from behind one-way glass, and comments are recorded in writing or on video for later study. Today, focus group researchers can even use videoconferencing and Internet technology to connect marketers in distant locations with live focus group action. Using cameras and two-way sound systems, marketing executives in a far-off boardroom can look in and listen, using remote controls to zoom in on faces and pan the focus group at will.

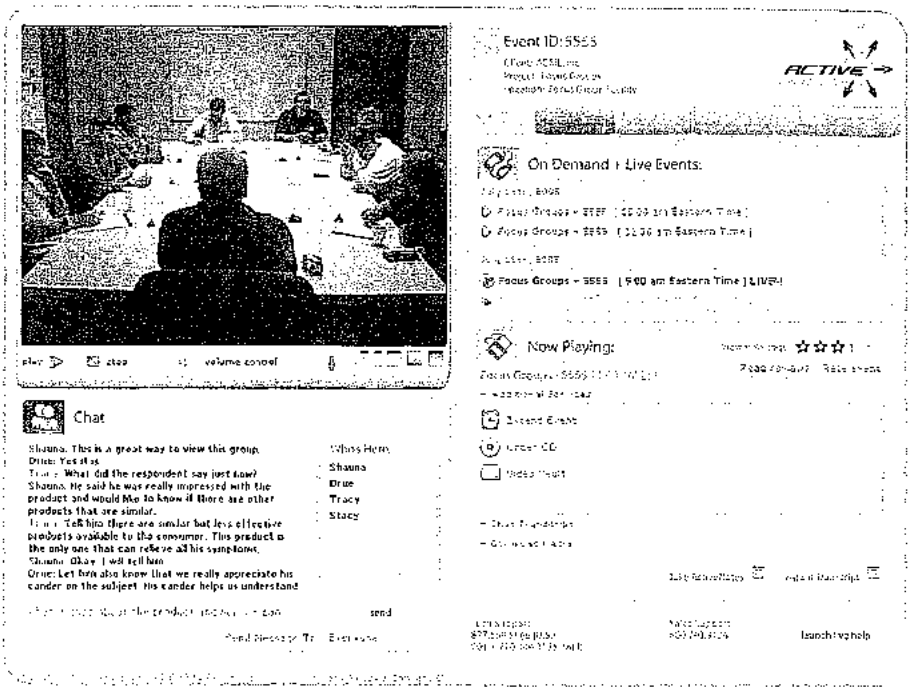
Focus group interviewing has become one of the major marketing research tools for gaining insights into consumer thoughts and feelings. However, focus group studies present some challenges. They usually employ small samples to keep time and costs down, and it may be hard to generalize from the results. Moreover, consumers in focus groups are not always open and honest in front of other people. "There's peer pressure in focus groups that gets in the way of finding the truth about real behavior and intentions," says one marketing executive.[14]

Thus, although focus groups are still widely used, many researchers are tinkering with focus group design. For example, Cammie Dunaway, chief marketing officer at Yahoo!, prefers "immersion groups"—four or five people with whom Yahoo!'s product designers talk informally, without a focus group moderator present. That way, rather than just seeing videos of consumers reacting to a moderator, Yahoo! staffers can work directly with select customers to design new products and programs. "The outcome is richer if [consumers] feel included in our process, not just observed," says Dunaway.[15]

Still other researchers are changing the environments in which they conduct focus groups. To help consumers relax and to elicit more authentic responses, they use settings that are more comfortable and more relevant to the products being researched. For example, they might conduct focus groups for cooking products in a kitchen setting, or focus groups for home furnishings in a living room setting. One research firm offers facilities that look just like anything from a living room or play room to a bar or even a courtroom.

Online marketing research
Collecting primary data through Internet surveys and online focus groups.

Advances in communication technologies have resulted in a number of high-tech contact methods. The latest technology to hit marketing research is the Internet. Increasingly, marketing researchers are collecting primary data through **online marketing research**—*Internet surveys, online panels, experiments,* and *online focus groups*. In



Focus group technology: Today, many researchers are employing videoconferencing and Internet technology to connect marketers with live focus group action. ActiveGroup allows researchers to view their focus groups and collaborate remotely from any location, no matter how distant. Says the company, "no traveling, no scheduling, no problems."

fact, by 2006, companies were spending an estimated 30 percent of their marketing research dollars online, making it the largest single data collection methodology.[16]

Online research can take many forms. A company can include a questionnaire on its Web site and offer incentives for completing it. Or it can use e-mail, Web links, or Web pop-ups to invite people to answer questions and possibly win a prize. The company can sponsor a chat room and introduce questions from time to time or conduct live discussions or online focus groups. A company can learn about the behavior of online customers by following their click streams as they visit the Web site and move to other sites. A company can experiment with different prices, use different headlines, or offer different product features on different Web sites or at different times to learn the relative effectiveness of its offerings. It can float "trial balloons" to quickly test new product concepts.

Web research offers some real advantages over traditional surveys and focus groups. The most obvious advantages are speed and low costs. Online focus groups require some advance scheduling, but results are practically instantaneous.[17]

> Looking for better methods of predicting consumer acceptance to potential new products, Pepsi recently turned to Invoke Solutions, an online consumer research company, which maintained several instant-message-style online panels of 80 to 100 people. Using the panels, Pepsi delved into attitudes among Gen Xers toward drinking mineral water. In just a few hours, the beverage marketer was able to gather and process detailed feedback from hundreds of consumers. At first, Pepsi marketers were jazzed that the group liked the idea of high levels of mineral content in water. But after further exchanges with the online panel, Pepsi beverage scientists on the scene squelched higher mineral levels; that would require adding sugar, which consumers didn't want, to make the taste acceptable. Using the online panels, "conclusions that could take three to four months to sort out through regular focus groups . . . got settled in a few hours," says an Invoke executive.

Internet research is also relatively low in cost. Participants can dial in for a focus group from anywhere in the world, eliminating travel, lodging, and facility costs. For surveys, the Internet eliminates most of the postage, phone, labor, and printing costs associated with other approaches. As a result, an Internet survey may be only 10 to 20 percent as expensive as mail, telephone, or personal surveys. Moreover, sample size has little influence on costs. Once the

Increasingly, companies are moving their research onto the Web. According to this Greenfield Online ad, in many ways, "it beats the old-fashioned kind."

questionnaire is set up, there's little difference in cost between 10 and 10,000 respondents on the Web.

Online surveys and focus groups are also excellent for reaching the hard-to-reach—the often-elusive teen, single, affluent, and well-educated audiences. It's also good for reaching working mothers and other people who lead busy lives. They respond to it in their own space and at their own convenience. The Internet also works well for bringing together people from different parts of the country, especially those in higher-income groups who can't spare the time to travel to a central site.

Using the Internet to conduct marketing research does have some drawbacks. For one, restricted Internet access can make it difficult to get a broad cross section of Americans. However, with Internet household penetration now at 64 percent in the United States, this is less of a problem. Another major problem is controlling who's in the sample. Without seeing respondents, it's difficult to know who they really are.

Even when you reach the right respondents, online surveys and focus groups can lack the dynamics of more personal approaches. The online world is devoid of the eye contact, body language, and direct personal interactions found in traditional focus group research. And the Internet format—running, typed commentary and online "emoticons" (punctuation marks that express emotion, such as :-) to signify happiness)—greatly restricts respondent expressiveness. Although the impersonal nature of the Internet may shield people from excessive peer pressure, it also prevents people from interacting with each other and getting excited about a concept.

To overcome such sample and response problems, many online research firms use opt-in communities and respondent panels. For example, online research firm Greenfield Online provides access to 12 million opt-in panel members in more than 40 countries. Advances in technology—such as the integration of animation, streaming audio and video, and virtual environments—also help to overcome online research dynamics limitations.

Perhaps the most explosive issue facing online researchers concerns consumer privacy. Some fear that unethical researchers will use the e-mail addresses and confidential responses gathered through surveys to sell products after the research is completed. They are concerned about the use of electronic agents (such as Spambots or Trojans) that collect personal information without the respondents' consent. Failure to address such privacy issues could result in angry, less-cooperative consumers and increased government intervention. Despite these concerns, most industry insiders predict healthy growth for online marketing research.[18]

Sampling Plan

Sample
A segment of the population selected for marketing research to represent the population as a whole.

Marketing researchers usually draw conclusions about large groups of consumers by studying a small sample of the total consumer population. A **sample** is a segment of the population selected for marketing research to represent the population as a whole. Ideally, the sample should be representative so that the researcher can make accurate estimates of the thoughts and behaviors of the larger population.

Designing the sample requires three decisions. First, *who* is to be surveyed (what *sampling unit*)? The answer to this question is not always obvious. For example, to study the

TABLE 4.4
Types of Samples

PROBABILITY SAMPLE	
Simple random sample	Every member of the population has a known and equal chance of selection.
Stratified random sample	The population is divided into mutually exclusive groups (such as age groups), and random samples are drawn from each group.
Cluster (area) sample	The population is divided into mutually exclusive groups (such as blocks), and the researcher draws a sample of the groups to interview.
NONPROBABILITY SAMPLE	
Convenience sample	The researcher selects the easiest population members from which to obtain information.
Judgment sample	The researcher uses his or her judgment to select population members who are good prospects for accurate information.
Quota sample	The researcher finds and interviews a prescribed number of people in each of several categories.

decision-making process for a family automobile purchase, should the researcher interview the husband, wife, other family members, dealership salespeople, or all of these? The researcher must determine what information is needed and who is most likely to have it.

Second, *how many* people should be surveyed (what *sample size*)? Large samples give more reliable results than small samples. However, larger samples usually cost more, and it is not necessary to sample the entire target market or even a large portion to get reliable results. If well chosen, samples of less than 1 percent of a population can often give good reliability.

Third, *how* should the people in the sample be *chosen* (what *sampling procedure*)? Table 4.4 describes different kinds of samples. Using *probability samples*, each population member has a known chance of being included in the sample, and researchers can calculate confidence limits for sampling error. But when probability sampling costs too much or takes too much time, marketing researchers often take *nonprobability samples*, even though their sampling error cannot be measured. These varied ways of drawing samples have different costs and time limitations as well as different accuracy and statistical properties. Which method is best depends on the needs of the research project.

Research Instruments

In collecting primary data, marketing researchers have a choice of two main research instruments—the *questionnaire* and *mechanical devices*. The *questionnaire* is by far the most common instrument, whether administered in person, by phone, or online.

Questionnaires are very flexible—there are many ways to ask questions. *Closed-end questions* include all the possible answers, and subjects make choices among them. Examples include multiple-choice questions and scale questions. *Open-end questions* allow respondents to answer in their own words. In a survey of airline users, Southwest might simply ask, "What is your opinion of Southwest Airlines?" Or it might ask people to complete a sentence: "When I choose an airline, the most important consideration is. . . ." These and other kinds of open-end questions often reveal more than closed-end questions because respondents are not limited in their answers. Open-end questions are especially useful in exploratory research, when the researcher is trying to find out *what* people think but not measuring *how many* people think in a certain way. Closed-end questions, on the other hand, provide answers that are easier to interpret and tabulate.

Researchers should also use care in the *wording* and *ordering* of questions. They should use simple, direct, unbiased wording. Questions should be arranged in a logical order. The first question should create interest if possible, and difficult or personal questions should be asked last so that respondents do not become defensive. A carelessly prepared questionnaire usually contains many errors (see Table 4.5).

Although questionnaires are the most common research instrument, researchers also use *mechanical instruments* to monitor consumer behavior. Nielsen Media Research attaches *people meters* to television sets in selected homes to record who watches which programs. Retailers use *checkout scanners* to record shoppers' purchases.

TABLE 4.5
A "Questionable Questionnaire"

Suppose that a summer camp director has prepared the following questionnaire to use in interviewing the parents of prospective campers. How would you assess each question?

1. What is your income to the nearest hundred dollars? *People don't usually know their income to the nearest hundred dollars, nor do they want to reveal their income that closely. Moreover, a researcher should never open a questionnaire with such a personal question.*

2. Are you a strong or weak supporter of overnight summer camping for your children? *What do "strong" and "weak" mean?*

3. Do your children behave themselves well at a summer camp? Yes ( ) No ( ) *"Behave" is a relative term. Furthermore, are* yes *and* no *the best response options for this question? Besides, will people answer this honestly and objectively? Why ask the question in the first place?*

4. How many camps mailed or e-mailed information to you last year? This year? *Who can remember this?*

5. What are the most salient and determinant attributes in your evaluation of summer camps? *What are salient and determinant attributes? Don't use big words on me!*

6. Do you think it is right to deprive your child of the opportunity to grow into a mature person through the experience of summer camping? *A loaded question. Given the bias, how can any parent answer yes?*

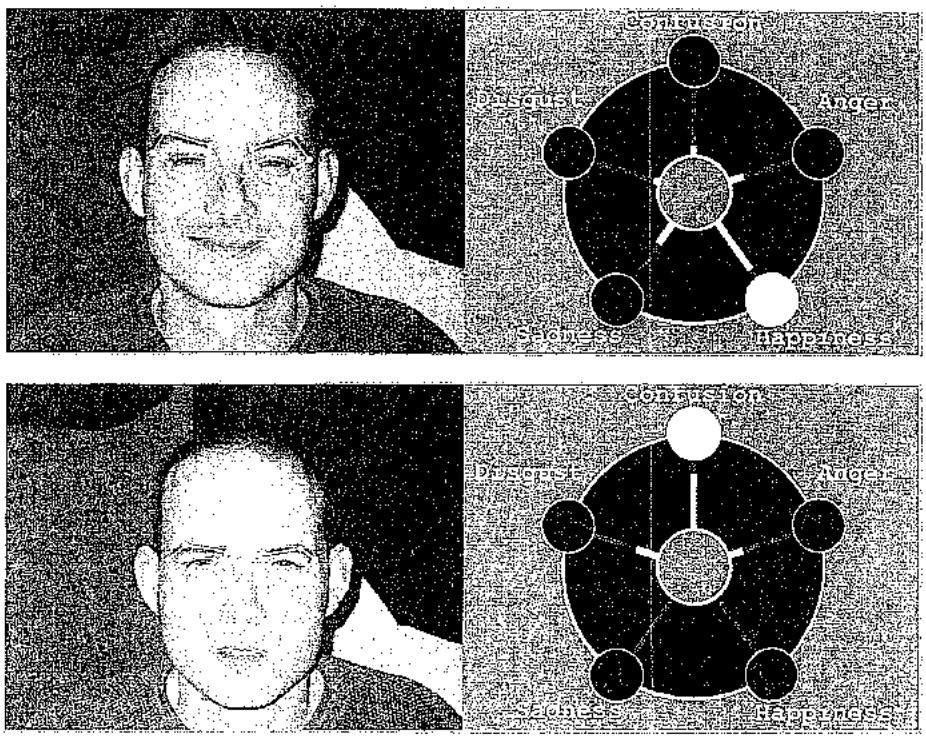
Other mechanical devices measure subjects' physical responses. For example, advertisers use eye cameras to study viewers' eye movements while watching ads—at what points their eyes focus first and how long they linger on any given ad component. IBM's BlueEyes human recognition technology goes even further.

> BlueEyes uses sensing technology to identify and interpret user reactions. The technology was originally created to help users to interact more easily with a computer. For example, IBM is perfecting an "emotion mouse" that will figure out computer users' emotional states by measuring pulse, temperature, movement, and galvanic skin response. Another BlueEyes technology records and interprets human facial reactions by tracking pupil, eyebrow, and mouth movement. BlueEyes offers a host of potential marketing uses. Retailers are already using the technology to study customers and their responses. And in the not-to-distant future, more than just measuring customers' physical reactions, marketers will be able to respond to them as well. An example: creating marketing machines that "know how you feel." Sensing through an emotion mouse that a Web shopper is frustrated, an Internet marketer offers a different screen display. An elderly man squints at a bank's ATM screen and the font size doubles almost instantly. A woman at a shopping center kiosk smiles at a travel ad, prompting the device to print out a travel discount coupon. Several users at another kiosk frown at a racy ad, leading a store to pull it. In the future, ordinary household devices—such as televisions, refrigerators, and ovens—may be able to do their jobs when we look at them and speak to them.[19]

Implementing the Research Plan

The researcher next puts the marketing research plan into action. This involves collecting, processing, and analyzing the information. Data collection can be carried out by the company's marketing research staff or by outside firms. The data collection phase of the marketing research process is generally the most expensive and the most subject to error. Researchers should watch closely to make sure that the plan is implemented correctly. They must guard against problems with contacting respondents, with respondents who refuse to cooperate or who give biased answers, and with interviewers who make mistakes or take shortcuts.

Researchers must also process and analyze the collected data to isolate important information and findings. They need to check data for accuracy and completeness and code it for analysis. The researchers then tabulate the results and compute statistical measures.



Mechanical measures of consumer response: New technologies can record and interpret human facial reactions. In the not-too-distant future, marketers may be using machines that "know how you feel" to not just gauge customers' physical reactions, but to respond to them as well.

Interpreting and Reporting the Findings

The market researcher must now interpret the findings, draw conclusions, and report them to management. The researcher should not try to overwhelm managers with numbers and fancy statistical techniques. Rather, the researcher should present important findings that are useful in the major decisions faced by management.

However, interpretation should not be left only to the researchers. They are often experts in research design and statistics, but the marketing manager knows more about the problem and the decisions that must be made. The best research means little if the manager blindly accepts faulty interpretations from the researcher. Similarly, managers may be biased—they might tend to accept research results that show what they expected and to reject those that they did not expect or hope for. In many cases, findings can be interpreted in different ways, and discussions between researchers and managers will help point to the best interpretations. Thus, managers and researchers must work together closely when interpreting research results, and both must share responsibility for the research process and resulting decisions.

Analyzing Marketing Information

Information gathered in internal databases and through marketing intelligence and marketing research usually requires more analysis. And managers may need help applying the information to their marketing decisions. This help may include advanced statistical analysis to learn more about the relationships within a set of data. Such analysis allows managers to go beyond means and standard deviations in the data and to answer questions about markets, marketing activities, and outcomes.

Information analysis might also involve a collection of analytical models that will help marketers make better decisions. Each model represents some real system, process, or outcome. These models can help answer the questions of *what if* and *which is best*. Marketing scientists have developed numerous models to help marketing managers make better marketing mix decisions, design sales territories and sales call plans, select sites for retail outlets, develop optimal advertising mixes, and forecast new-product sales.

Customer Relationship Management (CRM)

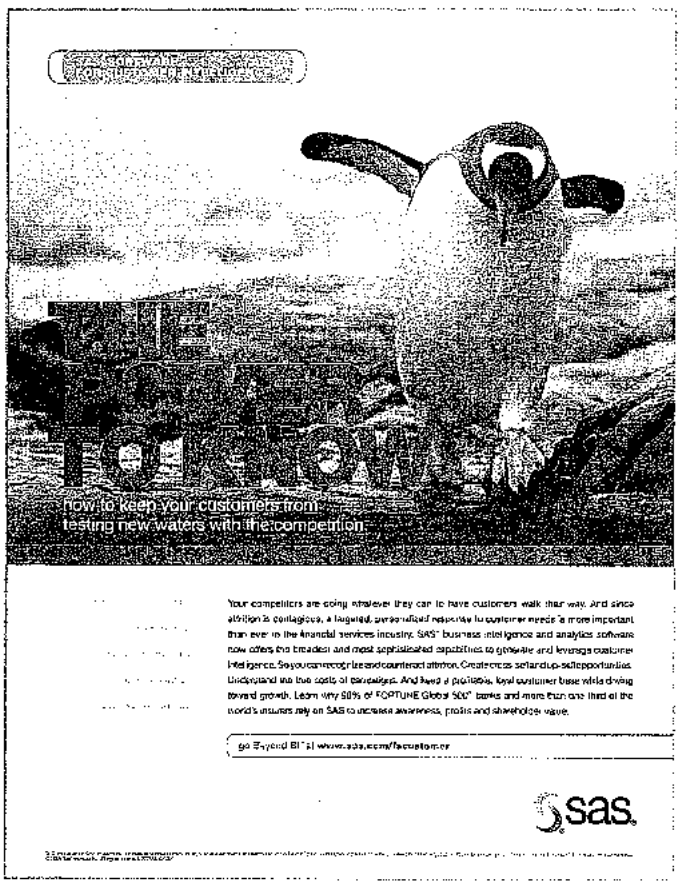
The question of how best to analyze and use individual customer data presents special problems. Most companies are awash in information about their customers. In fact, smart companies capture information at every possible customer *touch point*. These touch points include customer purchases, sales force contacts, service and support calls, Web site visits, satisfaction surveys, credit and payment interactions, market research studies—every contact between the customer and the company.

Customer relationship management (CRM) Managing detailed information about individual customers and carefully managing customer "touch points" in order to maximize customer loyalty.

The trouble is that this information is usually scattered widely across the organization. It is buried deep in the separate databases and records of different company departments. To overcome such problems, many companies are now turning to **customer relationship management (CRM)** to manage detailed information about individual customers and carefully manage customer "touch points" in order to maximize customer loyalty.

CRM first burst onto the scene in the early 2000s. Many companies rushed in, implementing overly ambitious CRM programs that produced disappointing results and many failures. More recently, however, companies are moving ahead more cautiously and implementing CRM systems that really work. A recent study by Gartner Group found that 60 percent of the businesses surveyed intend to adopt or expand their CRM usage over the next two years. By 2007, U.S. companies will spend an estimated $73.8 billion on CRM systems from companies such as Oracle, Microsoft, and SAS.[20]

CRM consists of sophisticated software and analytical tools that integrate customer information from all sources, analyze it in depth, and apply the results to build stronger customer relationships. CRM integrates everything that a company's sales, service, and marketing teams know about individual customers to provide a 360-degree view of the customer relationship.



CRM: SAS customer intelligence software helps companies to keep a profitable, loyal customer base by leveraging customer information and developing targeted, personalized responses to customer needs.

CRM analysts develop *data warehouses* and use sophisticated *data mining* techniques to unearth the riches hidden in customer data. A data warehouse is a companywide electronic database of finely detailed customer information that needs to be sifted through for gems. The purpose of a data warehouse is not just to gather information, but to pull it together into a central, accessible location. Then, once the data warehouse brings the data together, the company uses high-powered data mining techniques to sift through the mounds of data and dig out interesting findings about customers.

By using CRM to understand customers better, companies can provide higher levels of customer service and develop deeper customer relationships. They can use CRM to pinpoint high-value customers, target them more effectively, cross-sell the company's products, and create offers tailored to specific customer requirements. For example, Harrah's Entertainment, the world's largest casino operator, maintains a vast customer database and uses its CRM system to manage day-to-day relationships with important customers at its 43 casinos around the world (see Real Marketing 4.1).

CRM benefits don't come without cost or risk, not only in collecting the original customer data but also in maintaining and mining it. The most common CRM mistake is to view CRM only as a technology and software solution. But technology alone cannot build profitable customer relationships. "CRM is not a technology solution—you can't achieve . . . improved customer relationships by simply slapping in some software," says a CRM expert. Instead, CRM is just one part of an effective overall *customer relationship management strategy*. "Focus on the *R*," advises the expert. "Remember, a relationship is what CRM is all about."[21]

When it works, the benefits of CRM can far outweigh the costs and risks. Based on a recent study by SAP, customers using its mySAP CRM software reported an average 10 percent increase in customer retention and a 30 percent increase in sales leads. Overall, 90 percent of the companies surveyed increased in value from use of the software and reported an attractive return on investment. The study's conclusion: "CRM pays off." "No question that companies are getting tremendous value out of this," says a CRM consultant. "Companies [are] looking for ways to bring disparate sources of customer information together, then get it to all the customer touch points." The powerful new CRM techniques can unearth "a wealth of information to target that customer, to hit their hot button."[22]

Distributing and Using Marketing Information

Marketing information has no value until it is used to make better marketing decisions. Thus, the marketing information system must make the information readily available to the managers and others who make marketing decisions or deal with customers. In some cases, this means providing managers with regular performance reports, intelligence updates, and reports on the results of research studies.

But marketing managers may also need nonroutine information for special situations and on-the-spot decisions. For example, a sales manager having trouble with a large customer may want a summary of the account's sales and profitability over the past year. Or a retail store manager who has run out of a best-selling product may want to know the current inventory levels in the chain's other stores. Increasingly, therefore, information distribution involves entering information into databases and making it available in a timely, user-friendly way.

Many firms use a company *intranet* to facilitate this process. The intranet provides ready access to research information, stored reports, shared work documents, contact information for employees and other stakeholders, and more. For example, iGo, a catalog and Web retailer, integrates incoming customer service calls with up-to-date database information about customers' Web purchases and e-mail inquiries. By accessing this information on the intranet while speaking with the customer, iGo's service representatives can get a well-rounded picture of each customer's purchasing history and previous contacts with the company.

In addition, companies are increasingly allowing key customers and value-network members to access account, product, and other data on demand through *extranets*. Suppliers, customers, resellers, and select other network members may access a company's extranet to update their accounts, arrange purchases, and check orders against inventories to improve customer service. For example, one insurance firm allows its 200 independent agents access to a Web-based database of claim information covering one million customers. This allows the agents to avoid high-risk customers and to compare claim data with their own customer databases. And Wal-Mart's RetailLink extranet system provides suppliers with a two-year history of every product's daily sales in every Wal-Mart store worldwide, letting them track when and where their products are selling and current inventory levels. Other retailers are rolling out similar data-sharing systems, including Lowe's (LowesLink) and Target (PartnersOnline).[23]

Thanks to modern technology, today's marketing managers can gain direct access to the information system at any time and from virtually any location. They can tap into the system while working at a home office, from a hotel room, or from the local Starbuck's through a wireless network—anyplace where they can turn on a laptop and link up. Such systems allow managers to get the information they need directly and quickly and to tailor it to their own needs. From just about anywhere, they can obtain information from company or outside databases, analyze it using statistical software, prepare reports and presentations, and communicate directly with others in the network.

Other Marketing Information Considerations

This section discusses marketing information in two special contexts: marketing research in small businesses and nonprofit organizations and international marketing research. Finally, we look at public policy and ethics issues in marketing research.

Real Marketing

4.1

Companies everywhere covet the title "The world's greatest." Giant casino operator Harrah's Entertainment rightly claims that title in the gaming industry. Following its recent acquisition of Caesars Entertainment, Harrah's now captures a huge $7.1 billion in revenues from its 43 properties around the nation and world. The Harrah's portfolio includes such star-studded casino and gaming brands as Harrah's, Caesars, Horseshoe, Bally's, Flamingo, Showboat, and The World Series of Poker.

The recent Caesars acquisition only adds to the luster of what was an already very successful company. In the four years prior to the acquisition, Harrah's annual sales grew 37 percent and profits soared 76 percent. Harrah's stock is worth nearly two-and-a-half times its value five years ago, suggesting that Wall Street is betting on a bright future for the gaming giant.

Why has Harrah's been so successful? Everyone at Harrah's will quickly tell you that it's all about managing customer relationships. When you get right down to it, in physical terms, all casinos are pretty much alike. Most customers can't distinguish one company's slot machines, game tables, restaurants, and hotel rooms from another's. What sets Harrah's apart is the way it relates to its customers and creates customer loyalty. During the past decade, Harrah's has become *the* model for good CRM and customer-loyalty management.

At the heart of the Harrah's CRM strategy is its pioneering card-based Total Rewards program, the gaming industry's first and by far most successful loyalty program. Total Rewards members receive points based on the amount they spend at Harrah's facilities. They can then redeem the points for a variety of perks, such as cash, food, merchandise, rooms, and hotel show tickets. Total Rewards forms the basis for a two-part CRM process. First, the company uses Total Rewards to collect a mother lode of information about customers. Then, it mines this information to identify important customers and finely tune its market offerings to their specific needs.

Harrah's maintains a vast customer database. More than 80 percent of Harrah's customers worldwide—40 million customers in all—use a Total Rewards card. That's roughly one out of six adults in the United States alone. Information from every swipe of every card at each of Harrah's 43 casinos zips off to a central computer in Memphis, Tennessee. That's a lot of information. Harrah's current data warehouse can store up to 30 terabytes (30 trillion bytes) of data, roughly three times the volume of data contained in the U.S. Library of Congress. Amazingly, Harrah's is rapidly reaching full information capacity and plans to double its data storage capabilities.

Customer relationship management: Harrah's CRM system helps the company to focus its branding, marketing, and service development strategies on the needs of its most important customers. "We're trying to figure out which products sell, and we're trying to increase our customer loyalty."

Marketing Research in Small Businesses and Nonprofit Organizations

Just like larger firms, small organizations need market information. Start-up businesses need information about their industries, competitors, potential customers, and reactions to new market offers. Existing small businesses must track changes in customer needs and wants, reactions to new products, and changes in the competitive environment.

Managers of small businesses and nonprofit organizations often think that marketing research can be done only by experts in large companies with big research budgets. True, large-scale research studies are beyond the budgets of most small businesses. However, many of the marketing research techniques discussed in this chapter also can be used by smaller organizations in a less formal manner and at little or no expense. Consider how one small-business owner conducted market research on a shoestring before even opening his doors:[24]

> After a string of bad experiences with his local dry cleaner, Robert Byerley decided to open his own dry-cleaning business. But before jumping in, he conducted plenty of

Analyzing all this information gives Harrah's detailed insights into casino operations. For example, "visualization software" can generate a dynamic "heat map" of a casino floor, with machines glowing red when at peak activity, then turning blue and then white as the action moves elsewhere. More importantly, the information provides insights into the characteristics and behavior of individual customers—who they are, how often they visit, how long they stay, and how much they gamble and entertain.

From its Total Rewards data, Harrah's has learned that 26 percent of its customers produce 82 percent of revenues. And these best customers aren't the "high-rollers" that have long been the focus of the industry. Rather, they are ordinary folks from all walks of life—middle-aged and retired teachers, bankers, and doctors who have discretionary income and time. More often than not, these customers visit casinos for an evening, rather than staying overnight at the hotel, and they are more likely to play at the slots than at tables. What motivates them? It's mostly the intense anticipation and excitement of gambling itself.

Using such insights, Harrah's focuses its marketing and service development strategies on the needs of its best customers. For example, the company's advertising reflects the feeling of exuberance that target customers seek. The data insights also help Harrah's do a better job of managing day-to-day customer relationships. After a day's gaming, by the next morning, it knows which customers should be rewarded with free show tickets, dinner vouchers, or room upgrades.

In fact, Harrah's is now starting to process customer information in real time, from the moment customers swipe their rewards cards, creating the ideal link between data and the customer experience. Harrah's chief information officer calls this "operational CRM." Based on up-to-the-minute customer information, he explains, "the hotel clerk can see your history and determine whether you should get a room upgrade, based on booking levels in the hotel at that time and on your past level of play. A person might walk up to you while you're playing and offer you $5 to play more slots, or a free meal, or maybe just wish you a happy birthday."

Harrah's CRM and customer-loyalty efforts are paying off in spades. The company has found that happy customers are much more loyal—whereas customer spending decreases by 10 percent based on an unhappy casino experience, it increases by 24 percent with a happy experience. And Harrah's Total Rewards customers appear to be a happier bunch. Compared with nonmembers, member customers visit the company's casinos more frequently, stay longer, and spend more of their gambling and entertainment dollars in Harrah's rather than in rival casinos. Since setting up Total Rewards, Harrah's has seen its share of customers' average annual gambling budgets rise 20 percent, and revenue from customers gambling at Harrah's rather than their "home casino" has risen 18 percent.

Harrah's CEO Gary Loveman calls Total Rewards "the vertebrae of our business" and says, "It touches, in some form or fashion, 85 percent of our revenue." He says that Harrah's "customer-loyalty strategy [and] relationship marketing . . . are constantly bringing us closer to our customers so we better understand their preferences, and from that understanding we are able to improve the entertainment experiences we offer." Another Harrah's executive puts it even more simply: "It's no different from what a good retailer or grocery store does. We're trying to figure out which products sell, and we're trying to increase our customer loyalty." Ka-ching! Through smart CRM investments, Harrah's has hit the customer-loyalty jackpot.

Sources: Quotes and other information from Phil Bligh and Doug Turk, "Cashing In on Customer Loyalty," *Customer Relationship Management*, June 1, 2004, p. 48; Thomas Hoffman, "Harrah's Bets on Loyalty Program in Caesars Deal," *Computerworld*, June 27, 2005, p. 10; Daniel Lyons, "Too Much Information," *Forbes*, December 13, 2004, p. 110; Suzette Parmley, "When Its Customers Return, a Casino Always Wins," *Philadelphia Inquirer*, April 15, 2005; Kai Ryssdal and Andrew Park, "Harrah's Database of Gamblers," transcript from *Marketplace*, August 4, 2005; Neal A. Martin, "A Tempting Wager," *Barron's*, April 10, 2006, pp. 28-30; John S. Webster, "Harrah's CTO Tim Stanley Plays 'Operational CRM,' " June 7, 2006, accessed at www.computerworld.com; and Harrah's annual reports and other information accessed at http://investor.harrahs.com/phoenix.zhtml?c=84772&p=irol-reportsAnnual, August 2006.

market research. Making a careful tour of the town, he observed a dry-cleaning establishment in practically every strip mall. How would his stand out? To find an answer, Byerley spent an entire week in the library, researching the dry-cleaning industry. From government reports and trade publications, he learned it was a $16 billion-a-year industry dominated by mom-and-pop establishments. Better Business Bureau reports showed that dry cleaners accounted for a high number of complaints. The number one criticism: "Cleaners didn't stand behind what they did," he says. To get input from potential customers, using a marketing firm, Byerley held focus groups on the store's name, look, and brochure. He also took clothes to the 15 best cleaners in town and had focus-group members critique their work. In all, Byerley says he spent about $15,000 for the focus groups. Based on his research, he made a list of features for his new business. First on his list: His business would stand behind everything it did. Not on the list: cheap prices. Creating the perfect dry-cleaning establishment simply wasn't compatible with a discount operation.

His research complete, Byerley opened Bibbentuckers, a high-end dry cleaner positioned on high-quality service and convenience. Bibbentuckers featured a

Small businesses need market research, too. Before opening his own dry-cleaning business, Bibbentuckers owner Robert Byerley conducted plenty of low-budget market research, including talking with prospective customers. "You have to think like Procter & Gamble."

banklike drive-through area with curbside delivery. A computerized bar-code system read customer cleaning preferences and tracked clothes all the way through the cleaning process. Byerley added other differentiators, such as decorative awnings, refreshments, and TV screens. "I wanted a place people would be comfortable leaving their best clothes, a place that paired five-star service and quality with an establishment that didn't look like a dry cleaner," he says. The market research yielded results—Bibbentuckers' business took off, turning a profit after only four months. Today, it's a thriving three-store operation. "Too many small-business owners have a technician's mind-set rather than a marketing mind-set," says a small-business consultant. "You have to think like Procter & Gamble. What would they do before launching a new product? They would find out who their customer is and who their competition is."

Thus, managers of small businesses and nonprofit organizations can obtain good marketing information simply by *observing* things around them. For example, retailers can evaluate new locations by observing vehicle and pedestrian traffic. They can monitor competitor advertising by collecting ads from local media. They can evaluate their customer mix by recording how many and what kinds of customers shop in the store at different times. In addition, many small business managers routinely visit their rivals and socialize with competitors to gain insights.

Managers can conduct *informal surveys* using small convenience samples. The director of an art museum can learn what patrons think about new exhibits by conducting informal focus groups—inviting small groups to lunch and having discussions on topics of interest. Retail salespeople can talk with customers visiting the store; hospital officials can interview patients. Restaurant managers might make random phone calls during slack hours to interview consumers about where they eat out and what they think of various restaurants in the area.

Managers also can conduct their own simple *experiments*. For example, by changing the themes in regular fund-raising mailings and watching the results, a nonprofit manager can find out much about which marketing strategies work best. By varying newspaper advertisements, a store manager can learn the effects of things such as ad size and position, price coupons, and media used.

Small organizations can obtain most of the secondary data available to large businesses. In addition, many associations, local media, chambers of commerce, and government agencies provide special help to small organizations. The U.S. Small Business Administration offers dozens of free publications and a Web site (www.sbaonline.sba.gov) that give advice on topics ranging from starting, financing, and expanding a small business to ordering business cards. Other excellent Web resources for small businesses include the U.S. Census Bureau (www.census.gov) and the Bureau of Economic Analysis (www.bea.gov).

The business sections at local libraries can also be a good source of information. Local newspapers often provide information on local shoppers and their buying patterns. Finally, small businesses can collect a considerable amount of information at very little cost on the Internet. They can scour competitor and customer Web sites and use Internet search engines to research specific companies and issues.

In summary, secondary data collection, observation, surveys, and experiments can all be used effectively by small organizations with small budgets. Although these informal research methods are less complex and less costly, they still must be conducted carefully. Managers must think carefully about the objectives of the research, formulate questions in

advance, recognize the biases introduced by smaller samples and less skilled researchers, and conduct the research systematically.[25]

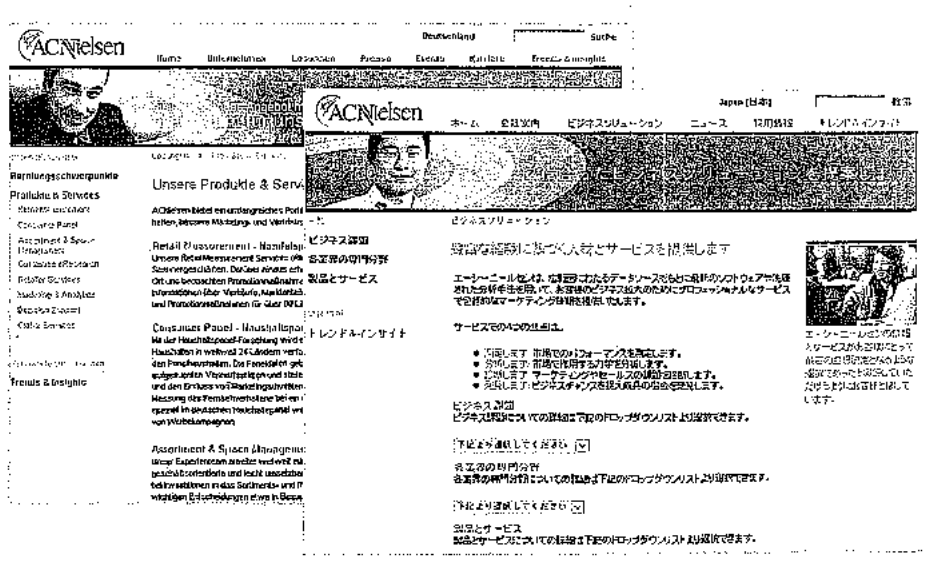
International Marketing Research

International marketing researchers follow the same steps as domestic researchers, from defining the research problem and developing a research plan to interpreting and reporting the results. However, these researchers often face more and different problems. Whereas domestic researchers deal with fairly homogenous markets within a single country, international researchers deal with diverse markets in many different countries. These markets often vary greatly in their levels of economic development, cultures and customs, and buying patterns.

In many foreign markets, the international researcher may have a difficult time finding good secondary data. Whereas U.S. marketing researchers can obtain reliable secondary data from dozens of domestic research services, many countries have almost no research services at all. Some of the largest international research services do operate in many countries. For example, ACNielsen Corporation (owned by VNU NV, the world's largest marketing research company) has offices in more than 100 countries. And 67 percent of the revenues of the world's 25 largest marketing research firms comes from outside their home countries.[26] However, most research firms operate in only a relative handful of countries. Thus, even when secondary information is available, it usually must be obtained from many different sources on a country-by-country basis, making the information difficult to combine or compare.

Because of the scarcity of good secondary data, international researchers often must collect their own primary data. Here again, researchers face problems not found domestically. For example, they may find it difficult simply to develop good samples. U.S. researchers can use current telephone directories, census tract data, and any of several sources of socioeconomic data to construct samples. However, such information is largely lacking in many countries.

Once the sample is drawn, the U.S. researcher usually can reach most respondents easily by telephone, by mail, on the Internet, or in person. Reaching respondents is often not so easy in other parts of the world. Researchers in Mexico cannot rely on telephone, Internet, and mail data collection—most data collection is door to door and concentrated in three or four of the largest cities. In some countries, few people have phones or personal computers. For example, whereas there are 1,118 telephone subscriptions and 544 PCs per thousand people in the United States, there are only 354 phone subscriptions and 54 PCs per thousand in Mexico. In Ghana, the numbers drop to 21 phone subscriptions and 3 PCs



Some of the largest research services firms have large international organizations. ACNielsen has offices in more than 100 countries, here Germany and Japan.

per thousand people. In some countries, the postal system is notoriously unreliable. In Brazil, for instance, an estimated 30 percent of the mail is never delivered. In many developing countries, poor roads and transportation systems make certain areas hard to reach, making personal interviews difficult and expensive.[27]

Cultural differences from country to country cause additional problems for international researchers. Language is the most obvious obstacle. For example, questionnaires must be prepared in one language and then translated into the languages of each country researched. Responses then must be translated back into the original language for analysis and interpretation. This adds to research costs and increases the risks of error.

Translating a questionnaire from one language to another is anything but easy. Many idioms, phrases, and statements mean different things in different cultures. For example, a Danish executive noted, "Check this out by having a different translator put back into English what you've translated from English. You'll get the shock of your life. I remember [an example in which] 'out of sight, out of mind' had become 'invisible things are insane.' "[28]

Consumers in different countries also vary in their attitudes toward marketing research. People in one country may be very willing to respond; in other countries, nonresponse can be a major problem. Customs in some countries may prohibit people from talking with strangers. In certain cultures, research questions often are considered too personal. For example, in many Latin American countries, people may feel embarrassed to talk with researchers about their choices of shampoo, deodorant, or other personal care products. Similarly, in most Muslim countries, mixed-gender focus groups are taboo, as is videotaping female-only focus groups.

Even when respondents are *willing* to respond, they may not be *able* to because of high functional illiteracy rates. And middle-class people in developing countries often make false claims in order to appear well-off. For example, in a study of tea consumption in India, over 70 percent of middle-income respondents claimed that they used one of several national brands. However, the researchers had good reason to doubt these results—more than 60 percent of the tea sold in India is unbranded generic tea.

Despite these problems, the recent growth of international marketing has resulted in a rapid increase in the use of international marketing research. Global companies have little choice but to conduct such research. Although the costs and problems associated with international research may be high, the costs of not doing it—in terms of missed opportunities and mistakes—might be even higher. Once recognized, many of the problems associated with international marketing research can be overcome or avoided.

Public Policy and Ethics in Marketing Research

Most marketing research benefits both the sponsoring company and its consumers. Through marketing research, companies learn more about consumers' needs, resulting in more satisfying products and services and stronger customer relationships. However, the misuse of marketing research can also harm or annoy consumers. Two major public policy and ethics issues in marketing research are intrusions on consumer privacy and the misuse of research findings.

Intrusions on Consumer Privacy

Many consumers feel positive about marketing research and believe that it serves a useful purpose. Some actually enjoy being interviewed and giving their opinions. However, others strongly resent or even mistrust marketing research. A few consumers fear that researchers might use sophisticated techniques to probe our deepest feelings or peek over our shoulders and then use this knowledge to manipulate our buying (see Real Marketing 4.2). Or they worry that marketers are building huge databases full of personal information about customers. For example, consider a company called Acxiom:

> Never heard of Acxiom? Chances are it's heard of you. Once upon a time in America, a savvy local store clerk knew that you had, say, three kids, an old Ford, a pool, and a passion for golf and yellow sweaters. Today Acxiom is that store clerk. It's the world's largest processor of consumer data, collecting and massaging more than a billion records a day. Acxiom's database on 96 percent of U.S. households gives marketers a so-called real-time, 360-degree view of their customers. How? Acxiom provides a 13-digit code for every person, "so we can identify you wherever you go,"

says the company's demographics guru. Each person is placed into one of 70 lifestyle clusters, ranging from "Rolling Stones" and "Single City Struggles" to "Timeless Elders." Acxiom's catalog offers businesses hundreds of lists, including a "pre-movers file," updated daily, of people preparing to change residences, as well as lists of people sorted by the frequency with which they use credit cards, the square footage of their homes, and their interest in the "strange and unusual." Its customers include eight of the country's top ten credit-card issuers, seven of the top ten retail banks, seven of the top 10 retailers, and all of the top 10 automakers. Acxiom may even know things about you that you don't know yourself.[29]

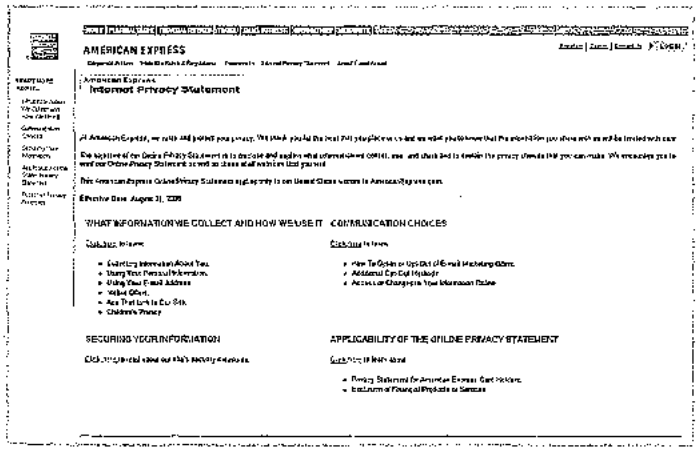
Other consumers may have been taken in by previous "research surveys" that actually turned out to be attempts to sell them something. Still other consumers confuse legitimate marketing research studies with telemarketing efforts and say "no" before the interviewer can even begin. Most, however, simply resent the intrusion. They dislike mail, telephone, or Web surveys that are too long or too personal or that interrupt them at inconvenient times.

Increasing consumer resentment has become a major problem for the research industry. One recent survey found that 70 percent of Americans say that companies have too much of consumers' personal information, and 76 percent feel that their privacy has been compromised if a company uses the collected personal information to sell them products. These concerns have led to lower survey response rates in recent years.[30]

Other studies found that 59 percent of consumers had refused to give information to a company because they thought it was not really needed or too personal, up from 42 percent five years earlier. And 71 percent of consumers believe that protecting information is more of a concern now than it was a few years ago. "Some shoppers are unnerved by the idea of giving up any information at all," says an analyst. When asked for something as seemingly harmless as a zip code, "one woman told me she always gives the zip code for Guam, and another said she never surrenders any information, not even a zip code, because "I don't get paid to help them with market research."[31]

The research industry is considering several options for responding to this problem. One example is the Council for Marketing and Opinion Research's "Your Opinion Counts" and "Respondent Bill of Rights" initiatives to educate consumers about the benefits of marketing research and to distinguish it from telephone selling and database building. The industry also has considered adopting broad standards, perhaps based on The International Chamber of Commerce's International Code of Marketing and Social Research Practice. This code outlines researchers' responsibilities to respondents and to the general public. For example, it says that researchers should make their names and addresses available to participants. It also bans companies from representing activities such as database compilation or sales and promotional pitches as research.[32]

Most major companies—including IBM, CitiGroup, American Express, Bank of America, and Microsoft—have now appointed a "chief privacy officer (CPO)," whose job is to safeguard the privacy of consumers who do business with the company. The chief privacy officer for Microsoft says that his job is to come up with data policies for the company to follow, make certain that every program the company creates enhances customer privacy, and inform and educate company employees about privacy issues and concerns. Similarly, IBM's CPO claims that her job requires "multidisciplinary thinking and attitude." She needs to get all company departments, from technology, legal, and accounting to marketing and communications working together to safeguard customer privacy.[33]



Consumer privacy: American Express was one of the first companies to post its privacy policies on the Web. "American Express respects your privacy and is committed to protecting it at all times."

American Express, which deals with a considerable volume of consumer information, has long taken privacy issues seriously. The company developed a set of formal privacy principles in 1991, and in 1998 it became one of the first companies to post privacy policies on its Web site. Its online Internet privacy statement

Real Marketing

Stepping into a Gap store at the South Shore Shopping Plaza on a recent evening, Laura Munro became a research statistic. Twelve feet above her, a device resembling a smoke detector, mounted on the ceiling and equipped with a hidden camera, took a picture of her head and shoulders. The image was fed to a computer and shipped to a database in Chicago, where ShopperTrak, a consumer research firm, keeps count of shoppers nationwide using 40,000 cameras placed in stores and malls.

ShopperTrak is a leader in an emerging market research field called "video mining." Video miners use advanced computer software to sort through video images, plucking data of interest to marketers, without a human ever seeing the video. ShopperTrak says it doesn't take pictures of faces. The company worries that shoppers would perceive that as an invasion of privacy. But nearly all of its videotaping is done without the knowledge of the people being taped. "I didn't even know there was a camera up there," says Ms. Munro, who popped into the mall on her way home from work to find a gift for her 12-year-old daughter.

Using such video information, ShopperTrak calculates and sells many valuable tidbits of data. For example, by comparing the number of people taped entering the store with the number of transactions, it arrives at a so-called "conversion rate"—the percentage of shoppers that buys versus the percentage that only browses. At a broader level, by combining video data gleaned from 130 retail clients and 380 malls with consumer spending data obtained from credit-card companies and banks, ShopperTrak can estimate sales and store traffic figures for the entire retail industry. Gap and other retail clients pay ShopperTrak for the store-level data. ShopperTrak sells the broader industry data to economists, bankers, and retailers.

More and more companies are now employing video miners to help them peek in on their customers. Video-tracking cameras, with lenses as small as a quarter, can provide data on everything from the density of shopping traffic in an aisle to the reactions of a shopper gazing at the latest plasma TV set. The cash register is a popular spot for cameras. But cameras can also be found in banks, fast-food outlets, and hotel lobbies (but not guest rooms).

Many companies now use video mining along with other traditional methods to help gain more rapid, accurate, and complete insights. For example, Kahn Research Group recently used video mining along with sales analysis and in-store behavioral tracking to determine what was and was not working to increase sales at Subway fast-food restaurants. Kahn's researchers hid golf-ball-sized cameras in several Subway restaurants to track customers' eye movements during the order process. Video analysis revealed that before and while sandwiches were being assembled, customers focused on the "sandwich artists" rather than on the menu board or promotional displays. In particular, drinks and sides received little customer notice. The researchers suggested that Subway move drinks and sides to a point where consumers would view them after making the major

Serving customers better or invading their privacy? Video miners use advanced computer software to sort through video images, plucking data of interest to marketers. Smile, you're being video mined!

tells customers in clear terms what information American Express collects and how it uses it, how it safeguards the information, and how it uses the information to market to its customers (with instructions on how to opt out).

In the end, if researchers provide value in exchange for information, customers will gladly provide it. For example, Amazon.com's customers do not mind if the firm builds a database of products they buy in order to provide future product recommendations. This saves time and provides value. Similarly, Bizrate users gladly complete surveys rating online seller sites because they can view the overall ratings of others when making purchase decisions. The best approach is for researchers to ask only for the information they need, to use it responsibly to provide customer value, and to avoid sharing information without the customer's permission.

Misuse of Research Findings

Research studies can be powerful persuasion tools; companies often use study results as claims in their advertising and promotion. Today, however, many research studies appear to be little more than vehicles for pitching the sponsor's products. In fact, in some cases, the

sandwich decision but before reaching the cash register. The research also revealed that promotions dangling from the ceiling were often ignored—Subway now uses table tents to remind customers to buy a snack for later.

Video mining software is fast—taking only hours to complete image interpretation tasks that might have taken weeks for humans to do. For example, Kahn's computers took only a couple of days to sift through 192 hours of tape on some 1,200 shoppers. Had Kahn tried to personally interview that many people, the process would have taken much longer, and the presence of the researchers might have annoyed shoppers and affected the results. "Nobody knew they were being recorded," says Greg Kahn of Kahn Research Group, "and our work didn't interfere with the store environment." Moreover, had people known they were being taped, he says, "I know many of the shoppers would have stuck their hands in front of the camera lens and refused to be recorded."

Video mining proponents say their research cameras are less invasive than security cameras, because their subjects aren't scrutinized as closely as security suspects. The images are studied only by the software and not by people, they say, and the videos are destroyed when the research is done. And marketers use the information to give their customers improved products and better service. "A driving force behind this technology is the fact that businesses want to be better prepared to serve their customers," says one marketing professor.

Still, the eavesdropping potential of video mining can be a bit unnerving. For example, VideoMining, another shopper-monitoring firm, set up cameras in two McDonald's restaurants to find out which customer types would find a new salad item most appealing. The research was done without consumers' knowledge. By measuring the shapes of people's faces, VideoMining's sensors were able to provide a breakdown of each salad buyers' race, gender, and age. The videos also revealed the length of time these customers spent waiting in line or looking at the menu before ordering. Looking ahead, the technology already exists for matching a photo with an individual's identity. Theoretically, retailers with customer databases built from the use of loyalty cards, store credit cards, and other in-house programs could link a transaction at a cash register with the face of a shopper appearing on the videotape. Smile, you're being video mined!

So, although video mining offers much promise for marketers and researchers, it also raises important privacy issues. People have pretty much learned to live with the approximately 29 million security cameras around the nation videotaping them in airports, government buildings, offices, schools, stores, busy intersections, and elsewhere. But few consumers are aware that they are being filmed for market research. Security is one thing, but the American public isn't likely to be as tolerant of secret market research using videotape.

Marketers appear to recognize this fact. ShopperTrak discloses its clients—the list includes, among others, Gap and its Banana Republic unit, The Limited and its Victoria's Secret chain, Payless ShoeSource; American Eagle Outfitters, and Children's Place Retail Stores. However, several other research companies that videotape shoppers say they sign agreements with clients in which they pledge not to disclose their names. Their clients want the taping to be secret, worrying that shoppers would feel alienated or complain of privacy invasion if they knew.

They're probably right to worry. Katherine Albrecht, founder and director of Caspian, a consumer-advocacy group, says consumers have "no idea such things as video tracking are going on," and they should be informed. When she tells them about such activities, she says the response she often hears is, "Isn't this illegal, like stalking? Shouldn't there be a law against it?" Robert Bulmash, a consumer-privacy advocate, says that being in a retailer's store doesn't give a retailer "the right to treat me like a guinea pig." He says he wonders about assurances that images are destroyed, because there isn't any way to verify such claims. The pictures "could be saved somewhere in that vast digital universe and some day come back to haunt us," he says.

Source: Portions adapted from Joseph Pereira, "Spying on the Sales Floor: 'Video Miners' Use Cameras Hidden in Stores to Analyze Who Shops, What They Like," *Wall Street Journal*, December 21, 2004, p. B1. Other information from Kelly Sitch, "'Mining' Software Studies Shoppers," *The Digital Collegian*, January 11, 2005, accessed at www.collegian.psu.edu/archive/2005/01/01-11-05tdc/01-11-05dscihealth-01.asp; Kahn Research Group (www.webehavior.com), July 2006; and www.videomining.com, July 2006.

research surveys appear to have been designed just to produce the intended effect. Few advertisers openly rig their research designs or blatantly misrepresent the findings; most abuses tend to be subtle "stretches." Consider the following examples:[35]

- A study by Chrysler contends that Americans overwhelmingly prefer Chrysler to Toyota after test-driving both. However, the study included just 100 people in each of two tests. More importantly, none of the people surveyed owned a foreign car brand, so they appear to be favorably predisposed to U.S. brands.
- A Black Flag survey asked: "A roach disk . . . poisons a roach slowly. The dying roach returns to the nest and after it dies is eaten by other roaches. In turn these roaches become poisoned and die. How effective do you think this type of product would be in killing roaches?" Not surprisingly, 79 percent said effective.
- A poll sponsored by the disposable diaper industry asked: "It is estimated that disposable diapers account for less than 2 percent of the trash in today's landfills. In contrast, beverage containers, third-class mail, and yard waste are estimated to account for about 21 percent of the trash in landfills. Given this, in your opinion, would it be fair to ban disposable diapers?" Again, not surprisingly, 84 percent said no.

Thus, subtle manipulations of the study's sample or the choice or wording of questions can greatly affect the conclusions reached.

In other cases, so-called independent research studies are actually paid for by companies with an interest in the outcome. Small changes in study assumptions or in how results are interpreted can subtly affect the direction of the results. For example, at least four widely quoted studies compare the environmental effects of using disposable diapers to those of using cloth diapers. The two studies sponsored by the cloth diaper industry conclude that cloth diapers are more environmentally friendly. Not surprisingly, the other two studies, sponsored by the disposable diaper industry, conclude just the opposite. Yet both appear to be correct *given* the underlying assumptions used.

Recognizing that surveys can be abused, several associations—including the American Marketing Association, Marketing Research Association, and the Council of American Survey Research Organizations (CASRO)—have developed codes of research ethics and standards of conduct. For example, the CASRO Code of Standards and Ethics for Survey Research outlines researcher responsibilities to respondents, including confidentiality, privacy, and avoidance of harassment. It also outlines major responsibilities in reporting results to clients and the public.[35] In the end, however, unethical or inappropriate actions cannot simply be regulated away. Each company must accept responsibility for policing the conduct and reporting of its own marketing research to protect consumers' best interests and its own.

Reviewing the Concepts

In today's complex and rapidly changing marketplace, marketing managers need more and better information to make effective and timely decisions. This greater need for information has been matched by the explosion of information technologies for supplying information. Using today's new technologies, companies can now obtain great quantities of information, sometimes even too much. Yet marketers often complain that they lack enough of the *right* kind of information or have an excess of the *wrong* kind. In response, many companies are now studying their managers' information needs and designing information systems to help managers develop and manage market and customer information.

1. **Explain the importance of information to the company and its understanding of the marketplace.**
   The marketing process starts with a complete understanding of the marketplace and consumer needs and wants. Thus, the company needs sound information in order to produce superior value and satisfaction for customers. The company also requires information on competitors, resellers, and other actors and forces in the marketplace. Increasingly, marketers are viewing information not only as an input for making better decisions but also as an important strategic asset and marketing tool.

2. **Define the marketing information system and discuss its parts.**
   The *marketing information system (MIS)* consists of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers. A well-designed information system begins and ends with users.

   The MIS first *assesses information needs*. The marketing information system primarily serves the company's marketing and other managers, but it may also provide information to external partners. Then, the MIS *develops information* from internal databases, marketing intelligence activities, and marketing research. *Internal databases* provide information on the company's own operations and departments. Such data can be obtained quickly and cheaply but often needs to be adapted for marketing decisions. *Marketing intelligence* activities supply everyday information about developments in the external marketing environment. *Market research* consists of collecting information relevant to a specific marketing problem faced by the company. Lastly, the MIS *distributes information* gathered from these sources to the right managers in the right form and at the right time.

3. **Outline the steps in the marketing research process.**
   The first step in the marketing research process involves *defining the problem and setting the research objectives*, which may be exploratory, descriptive, or causal research. The second step consists of *developing a research plan* for collecting data from primary and secondary sources. The third step calls for *implementing the marketing research plan* by gathering, processing, and analyzing the information. The fourth step consists of *interpreting and reporting the findings*. Additional information analysis helps marketing managers apply the information and provides them with sophisticated statistical procedures and models from which to develop more rigorous findings.

   Both *internal* and *external* secondary data sources often provide information more quickly and at a lower cost than primary data sources, and they can sometimes yield information that a company cannot collect by itself. However, needed information might not exist in secondary sources. Researchers must also evaluate secondary information to ensure that it is *relevant, accurate, current,* and *impartial*. Primary research must also be evaluated for these features. Each primary data collection method—*observational, survey,* and *experimental*—has its own advantages and disadvantages. Each of the various primary research contact methods—mail, telephone, personal interview, and online—also has its own advantages and drawbacks. Similarly, each contact method has its pluses and minuses.

4. **Explain how companies analyze and distribute marketing information.**
   Information gathered in internal databases and through marketing intelligence and marketing research usually requires more analysis. This may include advanced statistical analysis or the application of analytical models that will help marketers make better decisions. To analyze individual customer data, many companies have now acquired or developed special software and analysis techniques—called *customer relationship management (CRM)*—that integrate, analyze, and apply the mountains of individual customer data contained in their databases.

   Marketing information has no value until it is used to make better marketing decisions. Thus, the marketing information system must make the information available to the managers and others who make marketing decisions or deal with customers. In some cases, this means providing regular reports and updates; in other cases it means making nonroutine information available for special situations and on-the-spot decisions. Many firms use company intranets and extranets

to facilitate this process. Thanks to modern technology, today's marketing managers can gain direct access to the information system at any time and from virtually any location.

5. **Discuss the special issues some marketing researchers face, including public policy and ethics issues.**
Some marketers face special marketing research situations, such as those conducting research in small business, nonprofit, or international situations. Marketing research can be conducted effectively by small businesses and nonprofit organizations with limited budgets. International marketing researchers follow the same steps as domestic researchers but often face more and different problems. All organizations need to respond responsibly to major public policy and ethical issues surrounding marketing research, including issues of intrusions on consumer privacy and misuse of research findings.

Reviewing the Key Terms

Causal research 101
Customer relationship management (CRM) 112
Descriptive research 101
Ethnographic research 104
Experimental research 105
Exploratory research 101
Focus group interviewing 106
Internal databases 98
Marketing information system (MIS) 97
Marketing intelligence 99
Marketing research 100
Observational research 104
Online databases 103
Online marketing research 106
Primary data 102
Sample 108
Secondary data 102
Survey research 105

Discussing the Concepts

1. Figure 4.1 describes four marketing information system activities for developing information. In groups of four, determine how these activities would apply to Reebok developing the information it needs to market a new running shoe.
2. Assume that you are a regional marketing manager for a cellular phone company. List at least three different sources of internal data and discuss how these data would help you create cellular services that provide greater customer value and satisfaction.
3. Marketing research over the Internet has increased significantly in the past decade. Outline the strengths and weaknesses of marketing research conducted online.
4. According to the text, "The most common cause of CRM failures is that companies mistakenly view CRM only as a technology and software solution." What does this statement mean?
5. How does your college use an intranet to help its students access data?
6. Small businesses and nonprofit organizations often lack the resources to conduct extensive market research. Assume that you are the director of fundraising for a small nonprofit organization that focuses on a social issue. List three ways, using limited resources, that you could gather information about your primary donor group.

Applying the Concepts

1. Imagine you are an owner of a small children's retail clothing store that specializes in upscale girls' fashions from sizes 2 to 6. You have found a potential clothing line but you are unsure whether the line will generate the sales needed to be profitable. Which type of research methodology (exploratory, descriptive, or causal) is best suited to solve your research objective? Why?
2. Many consumer rights advocates argue that research data can be manipulated to support any conclusion. Assume you are attending a meeting where a research project for a new product in a new market is being presented. List five questions that you would ask to test the interpretation and objectivity of the findings being presented.
3. Visit zoomerang.com or another free online Web survey site. Using the tools at the site, design a short five-question survey on the dining services for your school. Send the survey to six friends and look at the results. What did you think of the online survey method?

Focus on Technology

Several companies offer technology that assists marketers in observational research. These techniques include cameras to monitor a shopper's movements, Web-tracking software to follow a visitor's click stream, and mechanisms to monitor the movement of a consumer's eyeballs. Visit eyetracking.com to learn more about eye-tracking devices. A visit to the "solutions" area of the Web site provides many examples of consumer marketing solutions, including television commercials, Web site branding, and package design. Eye-tracking measurements can help a television advertiser know whether the brand is noticed and, amazingly, report on whether the viewer's emotional reaction to the ad was pleasing or aversive.

1. What can marketers learn from eye-tracking technology in areas other than television advertising?
2. How can marketers use this technology to improve their marketing?
3. What might be some weaknesses with this technology?

Focus on Ethics

In 2001, Procter & Gamble (P&G) created Tremor, a network of approximately 280,000 young consumers ages 13-19. Tremor uses these teens, identified as being very connected to and influential with others, to spread word of mouth regarding not just its own products but also those of companies as diverse as AOL, Coca-Cola, and Toyota. Tremor does not pay the teens. Nor does it tell them what to say about specific products. But does provide them with extensive free samples and the knowledge that their input will be important to marketing decisions.

1. How might P&G identify, attract, and then qualify teens to be members of Tremor?
2. What do you think of using teens to spread word of mouth about products and brands? Are there any ethics issues?

Video Case Burke

For more than 75 years, Burke has been helping marketers to understand the marketplace and build stronger relationships with customers. As a full-service, custom marketing research firm, the company helps its clients better understand everything from how consumers make purchase decisions to what drives customer loyalty. In the beginning in 1931, researchers with Burke went door to door to gather information. Today, the company uses a rich array of avenues to reach consumers, including telephone and Web interviewing, direct mail, and online surveys.

Burke helps marketers discover information about customers, competitors, products, and marketing programs. But more than just gathering information, Burke's services help clients use the information. With sophisticated computer analysis, Burke offers the right information, in the right form, at the right time to help them make better marketing decisions.

After viewing the video featuring Burke, answer the following questions about marketing research.

1. What process does Burke use to define the research question?
2. How does Burke's process for marketing research compare to the steps outlined in the chapter?
3. How does Burke help clients build strong relationships with customers?

Company Case Enterprise Rent-A-Car: Measuring Service Quality

SURVEYING CUSTOMERS

Kevin Kirkman wheeled his shiny blue BMW coupe into his driveway, put the gearshift into park, set the parking brake, and got out to check his mailbox as he did every day when he returned home. As he flipped through the deluge of catalogs and credit card offers, he noticed a letter from Enterprise Rent-A-Car. He wondered why Enterprise would be writing him.

THE WRECK

Then he remembered. Earlier that month, Kevin had been involved in a wreck. As he was driving to work one rainy morning, another car had been unable to stop on the slick pavement and had plowed into his car as he waited at a stoplight. Thankfully, neither he nor the other driver was hurt, but both cars had sustained considerable damage. In fact, he was not able to drive his car.

Kevin had used his cell phone to call the police, and while he was waiting for the officers to come, he had called his auto insurance agent. The agent had assured Kevin that his policy included coverage to pay for a rental car while he was having his car repaired. He told Kevin to have the car towed to a nearby auto repair shop and gave him the telephone number for the Enterprise Rent-A-Car office that served his area. The agent noted that his company recommended using Enterprise for replacement rentals and that Kevin's policy would cover up to $20 per day of the rental fee.

Once Kevin had checked his car in at the body shop and made the necessary arrangements, he telephoned the Enterprise office. Within 10 minutes, an Enterprise employee had driven to the repair shop and picked him up. They drove back to the Enterprise office, where Kevin completed the paperwork and rented a Ford Taurus. He drove the rental car for 12 days before the repair shop completed work on his car.

"Don't know why Enterprise would be writing me," Kevin thought. "The insurance company paid the $20 per day, and I paid the extra because the Taurus cost more than that. Wonder what the problem could be?"

TRACKING SATISFACTION

Kevin tossed the mail on the passenger's seat and drove up the driveway. Once inside his house, he opened the Enterprise letter to find that it was a survey to determine how satisfied he was with his rental. The survey itself was only one page long and consisted of 13 questions (see Exhibit 1).

Exhibit 1

SERVICE QUALITY SURVEY

Please mark the box that best reflects your response to each question.	Completely Satisfied	Somewhat Satisfied	Neither Satisfied Nor Dissatisfied	Somewhat Dissatisfied	Completely Dissatisfied
1. Overall, how satisfied were you with your recent car rental from Enterprise on January 1, 2003?	☐	☐	☐	☐	☐

2. What, if anything, could Enterprise have done better? *(Please be specific)* _____

3a. Did you experience any problems during the rental process? Yes ☐ No ☐

3b. If you mentioned any problems to Enterprise, did they resolve them to your satisfaction? Yes ☐ No ☐ Did not mention ☐

	Excellent	Good	Fair	Poor	N/A
4. If you personally called Enterprise to reserve a vehicle, how would you rate the telephone reservation process?	☐	☐	☐	☐	☐

	Both at start and end of rental	Just at start of rental	Just at end of rental	Neither time
5. Did you go to the Enterprise office. . . .	☐	☐	☐	☐
6. Did an Enterprise employee give you a ride to help with your transportation needs. . . .	☐	☐	☐	☐

7. After you arrived at the Enterprise office, how long did it take you to:	Less than 5 minutes	5–10 minutes	11–15 minutes	16–20 minutes	21–30 minutes	More than 30 minutes	N/A
® pick up your rental car?	☐	☐	☐	☐	☐	☐	☐
® return your rental car?	☐	☐	☐	☐	☐	☐	☐

8. How would you rate the . . .	Excellent	Good	Fair	Poor	N/A
® timeliness with which you were either picked up at the start of the rental or dropped off afterwards?	☐	☐	☐	☐	☐
® timeliness with which the rental car was either brought to your location and left with you or picked up from your location afterwards?	☐	☐	☐	☐	☐
® Enterprise employee who handled your paperwork . . .					
at the START of the rental?	☐	☐	☐	☐	☐
at the END of the rental?	☐	☐	☐	☐	☐
® mechanical condition of the car?	☐	☐	☐	☐	☐
® cleanliness of the car interior/exterior?	☐	☐	☐	☐	☐

	Yes	No	N/A
9. If you asked for a specific type or size of vehicle, was Enterprise able to meet your needs?	☐	☐	☐

	Car repairs due to accident	All other car repairs/ maintenance	Car was stolen	Business	Leisure/ vacation	Some other reason
10. For what reason did you rent this car?	☐	☐	☐	☐	☐	☐

	Definitely will call	Probably will call	Might or might not call	Probably will not call	Definitely will not call
11. The next time you need to pick up a rental car in the city or area in which you live, how likely are you to call Enterprise?	☐	☐	☐	☐	☐

	Once—this was first time	2 times	3–5 times	6–10 times	11 or more times
12. Approximately how many times in total have you rented from Enterprise (including this rental)?	☐	☐	☐	☐	☐

13. Considering *all rental companies*, approximately how many times *within the past year* have you rented a car in the city or area in which you live (including this rental)?	0 times	1 time	2 times	3–5 times	6–10 times	11 or more times
	☐	☐	☐	☐	☐	☐

(case continues)