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# PART TWO
# Use Information to Drive Marketing Decisions



# CHAPTER 4
# Market Research Essentials

## LEARNING OBJECTIVES

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LO 4-2 Identify how critical internal (inside the firm) information is collected and used in making marketing decisions.
LO 4-3 Explain essential external (outside the firm) information collection methods.
LO 4-4 Recognize the value of market research and its role in marketing.
LO 4-5 Define the market research process.
LO 4-6 Illustrate current research technologies and how they are used in market research.

## MAKING GOOD MARKETING DECISIONS—THE NEED TO KNOW

*Information is power* speaks to the importance of good information in decision making. Companies realize the right information at the right time and in the right format (a critical but often neglected part of the process) is essential for decision makers. Marketers are usually the ones entrusted with scanning the environment for changes that might affect the organization. They are able to analyze a great deal of data quickly to better understand consumer trends and behavior. Companies are creating a new position, chief data officer, to manage the information and make more informed decisions linking corporate strategy with customer-driven information. As a result, creating procedures that collect, analyze, and access relevant information is a critical part of marketing management.[1]

A significant problem for most managers today is not having too little information but having too much. They frequently see interesting information that has no relevance to the immediate problem. As a result, companies need information systems that can collect and analyze huge amounts of information and then keep it for the right time and circumstance. Pulte Homes is one of the largest home builders in the United States. The company conducts research to learn how people move around in a home (the design flow), what features consumers want (for example, large master bedrooms and bathrooms), and what extras they want (upgraded countertops and wood trim). Also, Pulte studies demographic changes. For example, a large segment of the population, baby boomers (ages 53–71), is moving toward retirement; this has led the company to design and build smaller homes with more special features. Also, volatility in the real estate market has led the federal government to adopt changes in real estate financing,

and many states have followed suit with additional legislation. Finally, Pulte also needs to study changes in federal and state laws that affect home construction. These changes affect the homes people buy and, as a result, Pulte needs to be knowledgeable in all these areas.[2]

In addition to storing large amounts of data, marketing managers need a system to design and execute research that generates precise information. Consider the Apple iPhone. Before introducing a new model, Apple conducts tests with actual users to be sure the product fits their needs and performs as promised. The company also studies a wide range of other issues including competitors such as Samsung and long-term technology trends to identify key technologies for the iPhone now and in the future. Marketing managers need this information to make critical decisions as the iPhone is improved and the marketing plan put together. The success of the iPhone led competitors to incorporate similar features in their phones.


Apple seeks to improve each iteration of the iPhone based on user experiences.

©Leszek Kobusinski/ Shutterstock

These examples highlight the two fundamental types of market information decision makers need today. The first is data related to broad areas of interest such as demographic and economic trends, or the customer order fulfillment process inside the company. These data are used in strategic planning to help forecast potential new opportunities for company investment or to deal with possible problems before they become major issues for the company.[3] The second type of information needed addresses a specific question, for example, what is the best kitchen design for a retired baby boomer couple? Or what features would a young urban professional want in an iPhone? Questions like these require unique research designed to answer specific questions.[4] This chapter will examine both types of information needs. We'll start by discussing the market information system, which is designed to bring together many different kinds information useful to the marketing decision maker. Then we'll look at market research, which is the process marketers use to conduct research on specific market questions.

# MARKET INFORMATION SYSTEM

## The Nature of a Market Information System

**LO 4-1**

Describe the difference between market information systems and market research systems.

As noted earlier, marketing decision makers need limited amounts of the right data at any given time. Put simply, managers need what they need when they need it. When there is too much information, managers tend to either spend an excessive amount of time analyzing or get overwhelmed and ignore all the data. If they have too little information, managers are more likely to make poor decisions because they don't have all the facts. In either case, incorrect decisions are often the result. Exhibit 4.1 summarizes the various ways market research is used in making marketing decisions. As you can tell from Exhibit 4.1, market research takes many forms both inside and outside an organization.

## EXHIBIT 4.1 Market Research Is Critical to Marketing Decisions

| STAGES OR PROCESSES WITHIN MARKETING PLANNING | APPROPRIATE MARKET RESEARCH |
|---|---|
| **Situation Analysis**<br>• Identification of competitive strengths and weaknesses<br>• Identification of trends (opportunities and threats) | • Competitive barrier analysis<br>• Analysis of sources of competitive advantage<br>• Trend analysis<br>• Positioning analysis<br>• Identification of public and key issues concerns<br>• Measure of market share |
| **Selection of a Target Market**<br>• Analysis of the market<br>  • Selection of a target market | • Identification of segmentation bases<br>• Market segmentation study<br>• Needs assessment<br>• Determination of purchase criteria<br>• Buyer behavior analysis<br>• Market demand estimation |
| **Plan of the Marketing Mix**<br>• Product | • Product design assessment<br>• Competitive product analysis<br>• Competitive packaging assessment<br>• Packaging trends assessment<br>• Definition of brand image descriptors<br>• Identification of brand name/symbol<br>• New product ideation (concept development)<br>• Package development or redesign |
| • Price | • Measure of price elasticity<br>• Industry pricing patterns<br>• Price-value perception analysis<br>• Analysis of the effects of various price incentives |
| • Distribution | • Merchandising display assessment<br>• Inventory management assessment<br>• Location analysis (site analysis)<br>• Market exposure assessment |
| • Promotion | • Message assessment<br>• Content analysis<br>• Copy testing<br>• Media assessment<br>• Media buy assessment |
| **Marketing Control**<br>• Marketing audit | • Promotion effectiveness study<br>• Assessment of effectiveness of marketing mix |

Source: Cooper, Donald R. and Pamela S. Schindler, *Business Research Methods,* 12th ed. New York, NY: McGraw-Hill Education, 2014.

A **market information system (MIS)** is not a software package but a continuing process of identifying, collecting, analyzing, accumulating, and dispensing critical information to marketing decision makers. The MIS is really an "infor-

mation bank" where data relevant to the company's marketing efforts are collected and stored until such time as management needs to "withdraw" them. Generally, this information is not specific to a particular problem or question; rather, it is important information that the marketing decision maker will need at the appropriate time.[5] A company needs to consider three factors in creating an MIS.

**First, what information should the system collect?** In evaluating internal and external information sources, companies need to consider not only what information is important but also the source of the data. Think about all the ways a company gets competitor data—salespeople and customers in the field, competitor materials and websites, business-related websites such as Hoover's, and many others. Because there are so many sources of information, decisions must be made about what information will be collected and where it will come from.

**Second, what are the information needs of each decision maker?** Not all managers need the same information. The CEO probably doesn't want or need daily sales figures across individual product lines, but the local sales manager does. A good MIS is flexible enough for managers to customize the information they receive and, in some cases, the format they receive it in.

**Third, how does the system maintain the privacy and confidentiality of sensitive information?** Company databases hold a great deal of confidential data on customers, suppliers, and employees. By limiting access to the data to those with a need to know, companies protect relationships and build trust. As more data is collected and the ability to analyze it becomes more accurate, the need for a market information system becomes more critical. Although we will discuss Big Data in Chapter 5, it is important to note that companies like Google and Amazon are analyzing vast amounts of data collected through a variety of sources to prescribe (looking at what you have done and offering alternatives) and predict (making predictions of future behavior based on past behavior) customer behavior. It is no surprise, then, that companies are investing in building and enhancing their market information systems.

## Internal Sources—Collecting Information Inside the Company

**LO 4-2**

Identify how critical internal (inside the firm) information is collected and used in making marketing decisions.

At the heart of marketing is the relationship among the company, its products, and its customers. Critical to that relationship is a clear understanding of what is, and is not, working in the customer interface. Think about the senior manager at Microsoft who is concerned about rising dissatisfaction with customer support among its Office suite users. While there could be a number of reasons for this increase, the manager will first want to look at internal customer service metrics that include call wait times, ability of customer service representatives to handle the problems efficiently and effectively, number of customers who call back to address a problem, and a host of other metrics. In addition, web traffic monitoring by companies like Google Web Analytics can show customer service managers what areas of the website are creating problems for customers (for example, lack of clarity or direction, inconsistency with other customer messaging, not helpful to the customer), which can improve customer service. These are all internal sources of data. By looking at such critical internal metrics collected as part of the market information system, management is able to do two things. First, in our example, management might see that an increase in call wait times has led to higher customer dissatisfaction. Here information is used to identify the problem. A second and more effective use of market information systems is to proactively address issues before they become problems.[6] For example, management can set a benchmark stating that call wait times will not exceed two minutes. In this way, management can deal with a problem before it becomes a significant concern for the company. Of course, the investment in time and money needed to create and monitor such a system is significant.

A market information system can be as complicated as the company wants or can afford. It is expensive to collect and analyze data, and most companies don't maximize their existing information. Often, simply checking secondary sources such as legitimate websites will provide sufficient information for the marketing manager to make a decision in a particular situation. More formal information systems, however, provide a great deal more information that can help guide strategic decisions (changes in demographics can lead to new market opportunities) or address critical tactical issues (shorten call wait times for customer service).[7] Exhibit 4.2 identifies five common internal sources of data collected as a regular part of doing business. Unfortunately, managers are often not aware of all the information in their own company.

## From the Customer's Order to Order Fulfillment

Tracking a customer's initial inquiry through to order placement, delivery, payment, and follow-up after the purchase offers insight about the customer as well as insight about how well the company is working. CRM systems use customer data collected through market information systems to help drive customer-centric strategies, as discussed in Chapter 5. More specifically, the data collected and analyzed in a CRM system enable companies to:

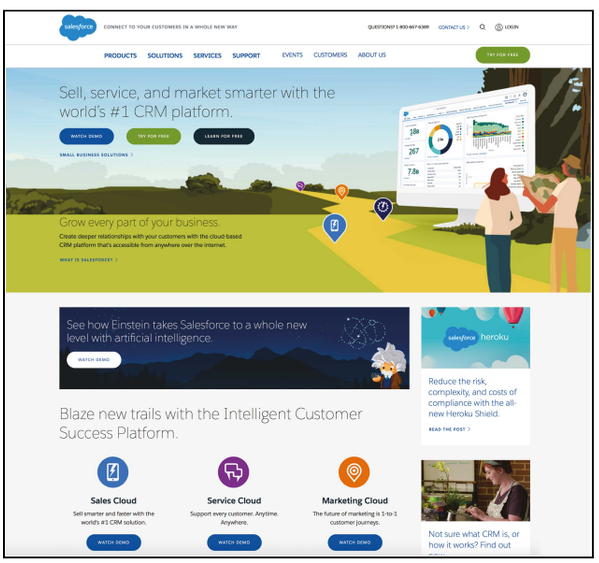
EXHIBIT 4.2 Internal Information Sources


- **Identify the frequency and size of customer orders.** By charting the frequency, size, and specific items included in an order, it's possible to assess customer satisfaction.
- **Determine the actual cost of a customer order.** Tools such as activity-based cost accounting can allocate time and overhead costs to specific customers. By combining that with information from each customer order, it is possible to get accurate cost and profitability measures of individual customers.
- **Rank customers based on established criteria like profitability.** Not all customers are equal, and the customer mix changes over time. Companies need to understand how each customer rates on a defined set of criteria to better allocate current resources and develop strategies for future growth. Starbucks' reward system actually adjusts based on profitability and usage. Frequent users, for example, have to earn more stars (buy more products) for rewards than newer, less frequent customers.
- **Calculate the efficiency of the company's production and distribution system.** Tracking customer orders makes it possible to assess many of the company's critical functions.

## Heard on the Street—Sales Information System

One of the best internal information sources is the sales force. Salespeople are on the front lines of the company-customer interface and have unique access to the customer. As a result, they are an excellent information source not only about the customer but also about market trends and even the competition.[8] This is particularly true in a business-to-business environment where salespeople are often the primary method for communicating with customers. Salespeople are usually the first to hear about changes with the customer, such as new personnel or the need for new products. What's more, as they interact with customers, salespeople frequently learn a great deal about competitors' tactics and plans.

Regrettably, companies time and again fail to maximize this information source. While salespeople may share what they learn with local management or other salespeople, companies have traditionally not had formal systems of collecting and analyzing data from the sales force.[9] This is changing, however, as management creates formal sales information systems to collect, analyze, store, and distribute information from the field to appropriate decision makers in the company.[10] A sales information system includes:




Salesforce.com has been successfully providing online CRM applications that allow salespeople to access customer data easily. Moreover, its customizable applications encourage salespeople to input customer data into the company sales information system.

Source: Salesforce.com, inc.

- **Formal systems for collecting data (getting the data).** Many salespeople write call reports summarizing each sales call. Much of the information on a call report is relevant in a sales information system. This includes products discussed with the customer, customer concerns, and changes in personnel.
- **Interpretation of data (analysis).** This may be done at the local level by sales managers who add additional insight to the "raw" data from the salesperson. In more sophisticated sales information systems, people at regional or national offices will analyze data from many salespeople looking for broad trends.
- **Distribution of data (getting the analysis to decision makers and back into the field).** A sales information system needs to distribute the information to management as part of a larger market information system. At the same time, it is important to get the information back out to the sales force. When trends, problems or solutions to problems, and opportunities are identified, salespeople benefit from learning quickly so they can respond in the field. Much of this information has a time value. If salespeople do not get the analysis in a timely manner, much of the benefit will be lost. For example, suppose a company learns from several salespeople that a major competitor is contacting customers about a new product. Getting this information to the entire sales force quickly will enable them to develop responses for their own customers.

## External Sources—Collecting Information Outside the Company

Staying connected to the business environment is no longer optional. Success is based, in part, on both the quality and quantity of information available to management. As a result, most companies engage in collecting, analyzing, and storing data from the macro environment on a continuous basis; this is known as marketing intelligence. The ability to do this well is a competitive advantage; successful companies accurately analyze and interpret environmental information, then develop strategies to take advantage of opportunities and deal with threats before they become problems (see Exhibit 4.3).

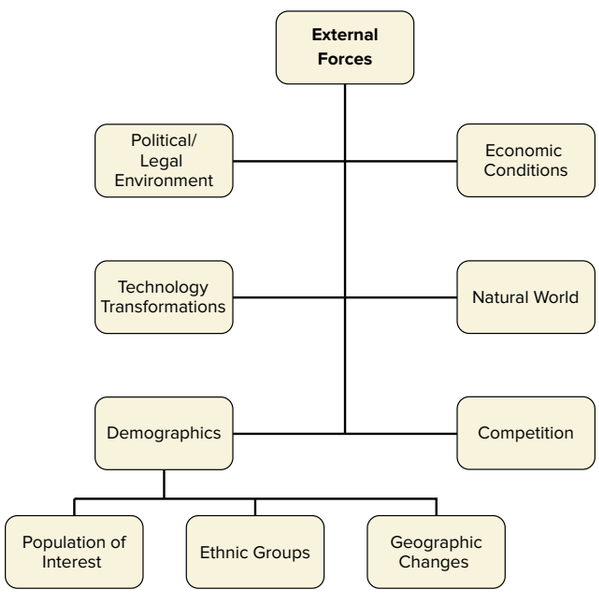
**LO 4-3**

Explain essential external (outside the firm) information collection methods.

### Demographics

Populations change over time, and companies must be aware of those changes. Not tracking and responding to demographic changes is a management failure because the data are easy to obtain and major changes occur slowly. Surprisingly, many companies do not do a good job of either learning about demographic trends or responding to them.

EXHIBIT 4.3 External Forces Affect Marketing Decisions




Demographics can be defined as the statistical characteristics of human populations, such as age or income, used to identify markets. They provide a statistical description of a group of people and are extremely useful in marketing, for two reasons. First, *demographics help define a market*. How old is a typical customer? How educated? What is the typical customer's income? These are all demographic characteristics that help describe a market. For example, a typical Mercedes-Benz automobile owner in the United States is a male, successful, and over 50 years old. By analyzing demographics, a company can define not only the "typical" customer but also its market at large. Second, *studying demographics helps identify new opportunities*. As baby boomers age, they will need, among other things, retirement communities. This represents an opportunity for companies to build unique retirement properties specifically for baby boomers.

Companies that deal directly with consumers develop customer profiles based on demographic information and compare their profiles against those of competitors. For example, the typical Mercedes-Benz owner tends to be

older than a BMW owner. Companies even create pictures of their "average" customer, highlighting key demographic data (age, gender, and ethnicity).

***Populations of Interest*** Marketers are not interested in all groups, only populations of interest. The difficult part for many marketers is separating relevant demographic data from irrelevant. For example, does cell phone maker Samsung need to know that world population growth is faster in less developed countries (among less developed countries the population is growing at 2 percent per year while developed countries are growing at less than 1 percent)? Your first response might be no as Samsung is likely interested in more developed countries with established cellular networks and people who can afford the technology. However, while less developed countries do not need the more expensive Samsung Galaxy phones, they could use older, less expensive technology to encourage economic development and build a communication network. Targeting less developed countries may offer Samsung an opportunity to establish a market presence in these countries even as they develop economically.

***Ethnic Groups*** Many countries are becoming more ethnically diverse as individuals increase their mobility. While some countries, such as the United Arab Emirates in the Middle East, have populations composed of a single ethnic group, others like the United States are much more ethnically diverse. Nearly three-quarters of the U.S. population is white, but trends project that whites will be less than 50 percent of the population in less than 30 years. Hispanics have shown the greatest increase among ethnic groups in the United States over the past 10 years. They are currently the second-largest minority group and are expected to continue growing as a percentage of the U.S. population.

The European Union has made it possible for individuals to move freely around member countries. While many of the member countries are still dominated by local ethnic groups, the European continent is becoming more ethnically diverse. For the most part, this leads to greater opportunities; however, some countries such as France find it difficult to assimilate certain groups into their culture. The market challenge then becomes developing effective marketing strategies across different ethnicities living in the same area.


As the Hispanic population grows, advertisers continue to seek endorsements from Hispanic celebrities like Sofia Vergara.

Source: Procter & Gamble

***Geographic Changes*** People are moving not only in the United States but around the world. As we just noted, the opening of borders in the European Union has increased the mobility of those living in the EU. A decades-old trend—people moving from the countryside to the city—continues around the globe and some cities, such as Mexico City, São Paulo, and others, find it difficult to cope with the influx of people that stretches their ability to provide social services (see Exhibit 4.4).

EXHIBIT 4.4 Selected Cities' Population with Projected Growth Rates

| Urban Area | Population (millions) | | | Rank | | |
|---|---|---|---|---|---|---|
| | 1990 | 2025 | 2050 | 1990 | 2025 | 2050 |
| Tokyo, Japan | 32.5 | 6.40 | 32.62 | 1 | 1 | 7 |
| Delhi, India | 8.3 | 22.2 | 35.19 | | 4 | 4 |
| Mexico City, Mexico | 15.3 | 21.01 | 24.33 | 3 | 6 | 10 |
| New York–Newark | 16.1 | 20.63 | 24.77 | 2 | 7 | 9 |
| Shanghai, China | 13.3 | 19.41 | 22.32 | | 9 | 15 |

| Urban Area | Population (millions) | | | Rank | | |
|---|---|---|---|---|---|---|
| São Paulo, Brazil | 14.8 | 21.43 | 22.83 | 4 | 5 | 14 |
| Mumbai (Bombay), India | 12.4 | 26.39 | 42.40 | 5 | 2 | 1 |
| Beijing, China | 10.8 | 14.55 | 15.97 | | 16 | 23 |
| Dhaka, Bangladesh | 6.7 | 22.50 | 36.16 | | 3 | 2 |
| Kolkata (Calcutta), India | 10.9 | 20.56 | 33.04 | 7 | 8 | 5 |

Source: Daniel Hoornweg and Kevin Pope, "Population Projections of the 101 Largest Cities in the 21st Century," Global Cities Institute Working Paper No. 4, January 2014.

The changes present opportunities but also challenges. The growth of Asian cultures means many companies must adjust their marketing strategies to fit the unique needs of Asian consumers. Appliance companies such as Whirlpool have redesigned their products to fit in smaller Asian kitchens. Coincidentally, downsizing products is a strategy consistent with the migration of people to urban centers. Mr. Coffee, Braun, and others have created coffeemakers designed for single households in the smaller living environments often found in large cities.

## Economic Conditions

Companies are keenly interested in the ability of their customers to purchase products and services. It is not surprising then that a good understanding of current and future economic trends is important in an effective market information system. There are two principal types of economic knowledge. The study of individual economic activity (firm, household, or prices) is known as microeconomics. At the other end of the spectrum, macroeconomics refers to the study of economic activity in terms of broad measures of output (gross national product or GNP) and input as well as the interaction among various sectors of an entire economy. Both are important for marketing managers. Microeconomics helps marketing managers understand how individuals set priorities and make buying decisions. Macroeconomics, on the other hand, gives a "big picture" perspective for an economy and can be helpful at looking for broad economic trends.

Indicators such as the GNP measure the health of an economy and are helpful in spotting trends. For example, if the GNP goes up, it is generally viewed as a sign the economy is doing well. As an economy slows, the GNP will slow.

## Technology Transformations

Few areas in business have been more affected by technology than marketing. Technology has been one of the major catalysts for change in the marketplace. Faster, smaller, and easier-to-use computers and powerful software facilitate sophisticated analyses right on the desks of front-line managers from anywhere in the world. Complex supply chain and manufacturing processes coupled with Internet connectivity allow customers real-time access to the entire manufacturing process. Consider the online order process for HP. A consumer places the order online, gets a final price and expected delivery date, then follows it from the assembly plant literally to their front door with a tracking number from the shipping company.

Marketing managers need to know the role of technology in their business today and also, perhaps even more importantly, its role in the future. Successfully assimilating technology into a business takes time and money. Almost every organization has had at least one negative experience with technology. Hershey Foods, for example, tried to bring a new CRM system online at the busiest selling season of the year for candy, Halloween, only to find problems implementing the system. The company estimated it was unable to fill $100 million worth of candy orders as a result of issues related to integrating the new software. At the same time, companies know they must remain open to new technologies that can significantly impact their business. For example, YouTube, Netflix, and others have changed the way people watch videos, creating opportunities for companies to reach new markets with creative messaging.[11]

## Natural World

Everyone lives on planet Earth, and business operates within the constraints of available natural resources. Two key issues drive marketers' need to know about the natural world. First, individuals, governments, and business

all recognize the need to manage the available resources well. It took the world roughly 150 years to use 1 trillion barrels of oil; however, it is predicted the world will use the next trillion barrels by 2030 and, while there may be a lot of oil left, it will be harder to get and more expensive. Governments and businesses are concerned about the effect of increasing energy costs on economic growth. Other resources such as water are also becoming increasingly scarce in parts of the world. In the western United States, for example, growth in communities such as Phoenix is considered in the context of water access, which limits future development as water becomes scarcer.

A second concern regarding the natural world is pollution. In some parts of the world, pollution takes a significant toll on the quality of life and economic growth in a community. In Mexico City, driving is limited for everyone to certain days during the week as congestion and smog create huge clouds of pollution that hang over the city. In China, government statistics show that of the lakes and rivers monitored for pollution levels, nearly 20 percent contained water considered unusable even for agricultural irrigation, causing losses in the billions of dollars.[12] These concerns influence marketers as they make decisions about how and where products are manufactured. For example, energy companies such as Chevron are investing billions to identify and develop more environmentally safe energy.

### Political/Legal Environment

Political judgments and, more broadly, the legal environment significantly affect company decisions and sometimes an entire industry. In 2003, the National Do Not Call Registry was created to minimize intrusive telemarketing calls. By registering, individuals protect themselves from telemarketing calls. Telemarketing companies are subject to significant fines if they call someone listed on the register. Millions of people signed up, and many companies were forced to reconfigure their marketing communications strategy.[13]

Local, state, and federal legislatures pass more business-related legislation than ever before. In addition, government agencies are more active in monitoring business activity. During the 1990s the Securities and Exchange Commission actively pursued several antitrust actions, the largest against Microsoft for illegal monopoly activity. As a result, Microsoft made changes to Windows 8 that opened it up to outside software vendors. More recently, the Dodd–Frank Wall Street Reform and Consumer Protection Act, passed in 2010, required banks and other financial institutions to dramatically change many aspects of their businesses including lending practices.

### Competition

One of the most important external environmental factors to consider is the competition. Companies want to know as much as possible about competitors' products and strategies. In highly competitive markets, companies are constantly adjusting their strategies to the competition. Airlines, for example, track competitors' pricing and adjust their pricing almost immediately to changes in the marketplace. When one airline offers a sale in a specific market, competitors will soon follow with sales in the same market. Identifying, analyzing, and effectively dealing with competitors is the focus in Chapter 2.

## MARKET RESEARCH SYSTEMS

Marketing managers are confronted with an unlimited number of problems, opportunities, and issues that require specific answers. Sometimes the information needed is not available from other sources or even from the company's own market information system. To get specific answers to important management questions, market research is necessary.

### The Importance of Market Research to Managers

Consider the following:

- You are a marketing manager for Harley-Davidson Motorcycles, and 90 percent of your bikes are sold to men. You believe women are a great potential target market but have had little success selling Harleys to them. What do you do?

**LO 4-4**

Recognize the value of market

- You are the director of advertising for McDonald's, and the company is getting ready to roll out a new advertising campaign designed to increase sales of a new sandwich. However, senior management wants to know if it will work. What do you do?

LO 4-4
Explain market research and its role in marketing.

The answers to situations like these lie in market research. Market research is the methodical identification, collection, analysis, and distribution of data related to discovering and then solving marketing problems or opportunities and enhancing good decision making. Several things come out of this definition. Good market research:

- **Follows a well-defined set of activities and does not happen by accident.** Rather, it comes as a result of the methodical identification, collection, analysis, and distribution of data.
- **Enhances the validity of the information.** Anyone can "Google" a topic and come up with a lot of information. However, following the market research process enhances the confidence that the research will discover and then solve marketing problems and opportunities.
- **Is impartial and objective.** It does not prejudge the information or develop answers to fit an already decided outcome; rather, it enhances good decision making.

Market research is also big business. In 2017 nearly $40 billion was spent on market research worldwide, with the United States ($18 billion) conducting the most research.[14] Some of these departments, such as McDonald's internal research group, are larger than many research companies and spend hundreds of millions of dollars a year conducting market research for their own organizations. Exhibit 4.5 lists the top market research companies in the world.

EXHIBIT 4.5 Top Five Market Research Companies in the World

| Organization | Headquarters | Total Revenue |
|---|---|---|
| The Nielsen Company | New York | $6.288 Billion |
| Kantar | London/Fairfield, CT | $3.785 Billion |
| IMS Health | Danbury, CT | $2.641 billion |
| Ipson SA | Paris, France | $2.219 billion |
| GfK SE | Nuremberg, Germany | $1.932 billion |

Source: American Marketing Association, *2016 AMA Gold Global Report*, p. 36.

## The Market Research Process

At the heart of the market research process is a search for understanding. Sometimes management seeks answers to a particular problem. In other situations, an opportunity needs to be evaluated before committing resources. By following the market research process, marketing managers can have greater confidence in the information they are receiving and, hopefully, make better informed decisions. As shown in Exhibit 4.6, the process consists of six steps.

LO 4-5
Define the market research process.

## Define the Research Problem

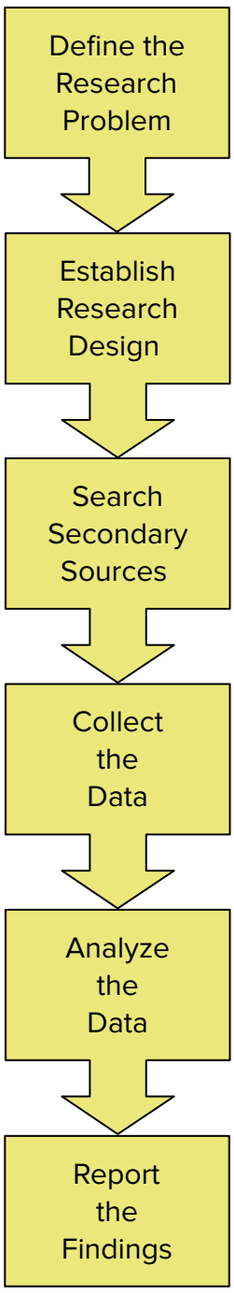
One of the biggest challenges facing a market researcher is accurately defining the problem. What exactly is the issue/opportunity/problem? Often managers are not clear about the problem and need help defining it. It is not uncommon for a market research professional to get a call that starts something like this: "I have a problem. Sales have been falling for six months and I am losing business to my competitors." The researcher knows that the real problem is not the company's declining sales; falling sales are the result, a symptom, of the real issue. Market research can be a useful tool helping senior managers identify and deal with the real issue.[15]

Given that management often does not have a clear understanding of the problem, defining the research problem involves two distinct steps. First, management, working with researchers and marketing decision makers, defines the management research deliverable. Exactly what does management want to do with this research? Keep in mind that decision makers are looking for information to help them make better, more informed decisions. For example, if you are the director of advertising for McDonald's, you want to increase sales of a new sandwich, and a new advertising campaign can help accomplish that goal. However, before you decide to spend a lot of money on the campaign, you want to know if it is going to be successful.

Once the management research deliverable has been identified, the next step is to define the research problem. Exactly what information is needed to help management in this situation? In our example, that means assessing the target market's response to the new advertising campaign.

In the McDonald's example, the research problem is fairly straightforward. However, there are often multiple research problems, and researchers will have to prioritize which problems to study first. Consider the example of Harley-Davidson motorcycles and targeting more female riders. Management may want to know: (1) How many women would be in the market for a motorcycle and, more specifically, how many women would be in the market for a large bike like a Harley? (2) What kind of motorcycle would they want to buy? (3) If Harley-Davidson were to create a new bike, how would loyal, dedicated Harley-Davidson owners react to it? You can begin to see why it is necessary for management and researchers to prioritize the problems and identify which research issues to address first.[16]

EXHIBIT 4.6 The Market Research Process




Source: H. Igor Ansoff, *The New Corporate Strategy*, New York, NY: John Wiley & Sons, 1988.

## Establish the Research Design

Following problem definition, companies must establish a research design, or a plan of action for attacking the research problem. Research designs consist of five activities, each of which is designed to address a specific question about the research process, as shown in Exhibit 4.7. It is critical that researchers develop and execute a research design so that decision makers can have confidence in the research findings. Effective market research is dependent on creating a research design and then executing it.[17] Conversely, and this is a problem for decision

makers, bad market research cannot yield good information. When this happens, it severely limits management's confidence in the results.

EXHIBIT 4.7 Research Design Activities

| Activity | Question to Be Answered |
|---|---|
| Type of research | What kind of research needs to be done? |
| Nature of data | What kind of data do we need? |
| Nature of data collection | How should we collect the data? |
| Information content | What do we need to know? |
| Sampling plan | Who should be included in the research? |

While multiple designs often could work in any research situation, it is important to specify one design and follow it throughout the research. Decisions made at the research design stage affect the rest of the project, and it is not appropriate to start over once a project has begun. Let's examine each of these activities.

***Type of Research: What Kind of Research Needs to Be Done?*** Not all market research involves complex, costly studies. People do market research all the time and don't think of it that way. For example, a salesperson who visits a website to learn more about a customer before a sales call is engaged in market research. The key is to fit the research to the unique requirements of the situation.

There are three basic types of research: exploratory, descriptive, and causal. While the complexity and methodology change for each type of research, it is not necessarily true that causal research is better than exploratory. Let's look at each research type more closely.

As the name implies, exploratory research is really about discovery. Reasons for conducting exploratory research include:

- Clarifying the research problem.
- Developing hypotheses for testing in descriptive or causal research.
- Gaining additional insight to help in survey development or to identify other research variables for study.
- Answering the research question.

Many times conducting exploratory research will provide sufficient information to answer the research question. Even if more sophisticated research is needed, exploratory research is usually the first step.

Descriptive research seeks to describe or explain some phenomenon. Often this involves something going on in the marketplace and can include issues such as:

- Identifying the characteristics of our target market.
- Assessing competitors' actions in the marketplace.
- Determining how customers use our product.
- Discovering differences across demographic characteristics (age, education, income) with respect to the use of our product or that of our competitors.

Descriptive research uses many different methods including secondary data, surveys, and observation. Some of these methods are also used in exploratory research. The difference is how you use the information. Descriptive research uses a different, more restrictive and rigorous methodology than exploratory research.

Descriptive research identifies associations between variables; for example, the customers for Harley-Davidson motorcycles tend to be middle-aged, successful men. Causal research tries to discover the cause and effect between variables.

In our Harley-Davidson example, does an increase in Harley-Davidson advertising directed toward men lead to increased sales of Harley-Davidson motorcycles? This can be particularly useful in making important marketing decisions. Consider a critical decision faced by all marketing managers: What effect will a price increase have on sales? Causal research can determine the change in the number of sales for different price levels. The types of research vary a great deal, so the question becomes: What kind of research is appropriate in a given circumstance? The following factors help make that determination.

**Benefit versus cost:** Before making any other decisions about the type of marketing research to use, it is essential to assess the benefits versus the costs. Put simply, if the benefits of doing the research do not exceed the cost, don't do the research.

**Time until decision:** Decision makers sometimes have very little time between realizing a need for additional information and making the decision. When time is very short (a matter of days), it is simply not possible to conduct in-depth market research. The Internet can cut the time needed for a study from months to weeks, but when time is short researchers may have to rely on more exploratory research and the use of secondary data.

**Nature of the decision:** The more strategic the decision, the more important the information and the greater the need for primary data. Conversely, if the decision is primarily tactical (for example, decisions about where to place advertising), secondary data, like reviewing a medium's demographics and rate card, will likely be sufficient to make the decision.

**Availability of data:** Companies already have a lot of data as a result of CRM and other internal information systems. Consequently, it may not always be necessary to collect primary data when existing or secondary data will provide the necessary answers to the research problems.

***Nature of Data: What Kind of Data Do We Need?*** Once the type of research has been determined, the next step is to evaluate what kind of data is needed for the research. The nature of the data will determine how the data are collected and is driven by the kind of research the company is undertaking.[18] The basic question is, does the research require primary data—data collected specifically for this research question—or will secondary data—data collected for some other purpose than the problem currently being considered—be sufficient? Even if primary data are collected, almost all research involves some secondary data collection, which we will talk about in the next section.

Primary data are collected using one of two approaches: qualitative and quantitative. Qualitative research is less structured and can employ methods such as surveys and interviews to collect the data; qualitative research employs small samples and is not meant to be used for statistical analyses. Quantitative research is used to develop a more measured understanding using statistical analysis to assess and quantify the results.[19] Now let's look at the nature of data collection.

***Nature of Data Collection: How Should the Data Be Collected?*** No one technique is better than another, but it is important to use the right technique based on an assessment of the research problem and research type. Let's evaluate the various approaches to collecting primary data. Exploratory research techniques include focus groups and in-depth interviews.

Without question, the most widely used qualitative research technique is focus groups. Perhaps for this reason, it is also one of the most misused.[20] A focus group is a meeting (either in person or increasingly online) of 6 to 10 people that is moderated by a professional who carefully moves the conversation through a defined agenda in an unstructured, open format. Generally, the participants are selected on the basis of some criteria. Companies like Walmart and Unilever make use of web panels that allow companies to collect relevant information quickly and cost-effectively.[21] For example, they may be current customers or possess certain demographic characteristics (age, income, education), but they will all have at least one shared attribute.

The value of focus groups lies in the richness of the discussion. A good moderator can draw out a lot of information from the participants. For example, the marketing manager for Harley-Davidson might use focus groups to learn how women relate to motorcycles. The trade-off is a deeper understanding of each participant versus a more superficial knowledge of additional people. Herein lies the mistake many people make with focus groups. They assume that the results of a focus group are generalizable to a population of interest. This is not the case. Focus groups are not a representative sample, and care should be taken to interpret the results properly. However, focus groups do provide insights on an issue that are useful to researchers as they develop quantitative research techniques. Focus group data provide a good starting point from which researchers can develop specific questions used in survey instruments.[22]

Another common qualitative technique is the in-depth interview. An in-depth interview is an unstructured (or loosely structured) interview with an individual who has been chosen based on some characteristic of interest, often a demographic attribute. This technique differs from focus groups in that the interview is done one on one rather than in a small group. The same advantages and disadvantages are present here as with focus groups, so researchers most often use this technique to help formulate other types of research (surveys, observational research).

Descriptive research techniques include surveys, behavioral data, and observational data. Of the quantitative research techniques used to collect primary data, surveys, in their various forms, are the most prevalent. While they

can be used informally in exploratory research, their most common purpose is in descriptive research. Surveys are structured questionnaires given to a sample group of individuals representing the population of interest and are intended to solicit specific responses to explicit questions.[23]

There are a number of survey methods. Historically, mail and telephone surveys were the most common. Today, electronic surveys have become widely adopted for their speed, ease of use, and relatively low cost. E-surveys can easily be done over the Internet using services such as SurveyMonkey.[24]

Behavioral data include information about when, what, and how often customers purchase products and services as well as other customer "touches" (for example, when they contact the organization with a complaint or question). When companies match this kind of information with demographic and psychographic information, they can see differences in purchase patterns. Behavior is usually more reliable than surveys because it is based on what the respondents actually do rather than what they say they are going to do.

It is possible to get a lot of insight about people by simply watching what they do in various situations. Observational data are the behavioral patterns among the population of interest. One of the most common uses of this type of research is in retailing. Retailers watch how people move through a store, noting what aisles they go down and where they spend their time. In recent years a more intrusive approach to observational data has been used to actually examine people in a personal setting (for example, their homes). In this approach, the observer enters into the world of the individual rather than standing back and simply watching activities. Researchers see people in a very personal environment to better understand how people use and interact with products.

Harley-Davidson does market research to learn more about developing products that appeal to women.

©Ramzi Haidar/AFP/Getty Images

A variation of observational data is mechanical observation. Mechanical observation uses a device to chronicle activity. Some forms of mechanical observation are benign and not intrusive on the individual. Turnstiles, for example, record people coming into or going out of an area. Traffic counters record the number of cars on a given street for a set time period.

There are, however, mechanical devices that are more invasive. *Mechanical devices* can be very useful for researchers but are often used sparingly because of the cost and also the bias associated with the respondent's awareness of the device. Eye cameras can track the movement of an eye as the individual watches an ad. From this researchers can determine what the person sees first, what he is focusing on in the ad, and how his eyes move around the ad. Another device, the galvanometer, is attached to the skin and measures subtle changes in skin temperature. Researchers can then determine if the respondent found the ad interesting. With the advent of sophisticated home assistants, it is possible to track people right in their homes. Alexa, from Amazon, is a home assistant that helps users carry out various functions around the home. At the same time, it collects all the information generated around each interaction and sends it to Amazon.

***Information Content: What Do We Need to Know?*** A critical part of research design involves determining exactly what information is needed and how to frame the questions to get that information. From the questions used in focus groups to long questionnaires, it is important to consider the structure and wording as well as the response choices. Most often this issue comes up in designing questionnaires. As the most commonly used primary research technique, the survey questionnaire allows a lot of variability in its design and structure. Some surveys, such as comment cards, are short and ask only a few questions. Others, such as new car satisfaction surveys, can be much longer and ask dozens of questions. No matter what the situation, careful attention must be paid to the design, structure, and format of each question. For years marketers have been interested in building and measuring customer loyalty.

Today, researchers must also consider the method of survey delivery. For example, mail surveys differ significantly from telephone surveys because respondents interact with the questions differently. Electronic surveys present a different challenge, although their structure is more easily adapted from a mail questionnaire.

Researchers must consider which of the many types of question formats is most appropriate for the situation. One of the most basic decisions is whether to use open-ended or closed-ended questions. Open-ended questions encourage respondents to be expressive and offer the opportunity to provide more detailed, qualitative responses. As a result, these kinds of questions are often used in exploratory research. Closed-ended questions, on the other

hand, are more precise and provide specific responses. As a result, they allow for more quantitative analysis and are most often used in descriptive research. Frequently, questionnaires will contain a mix of open-ended and closed-ended questions to get both qualitative and quantitative information in a single survey.

***Sampling Plan: Who Should Be Included in the Research?*** Once the other elements of the research design have been developed, it is time to consider who will be selected for the research. The most basic decision is whether to conduct a census or to sample a group of individuals from the population. A census is a comprehensive record of each individual in the population of interest, while a sample is a subgroup of the population selected for participation in the research. A census may seem like the better approach because everyone in the population is included in the study. Unfortunately, most of the time the number and diversity of the population are so large that it is simply not physically or financially possible to communicate with everyone. As a result, sampling is by far the preferred method of selecting people for market research.[25]

There are two basic approaches to sampling: probability and nonprobability sampling. It is important to keep in mind that one is not necessarily better than the other; rather, the key to making the right choice is to match the sampling approach with the research. Budgetary constraints will also likely influence the decision. Probability sampling uses a specific set of procedures to identify individuals from the population to be included in the research. From here, a specific protocol is identified to select a number of individuals for the research. As an example, suppose Bank of America is interested in finding out more about a group of its customers holding a certain kind of credit card. Let's assume there are 10 million customers holding this particular card. The bank wants to randomly choose 5,000 individuals for the survey. That means that everyone has a 5,000/10,000,000 = .0005 chance of being selected. Next, Bank of America will create an algorithm to randomly identify 5,000 individuals from the list of 10 million. The algorithm ensures that, while everyone has a .0005 chance of being selected, only 5,000 will be sampled from the entire group.

A second approach is called nonprobability sampling and, as the name implies, the probability of everyone in the population being included in the sample is not identified. The chance of selection may be zero or not known. This type of sampling is often done when time and/or financial constraints limit the opportunity to conduct probability sampling. The most significant problem with nonprobability sampling is that it significantly limits the ability to perform statistical analyses and generalize conclusions beyond the sample itself.

## Search Secondary Sources

Secondary data are almost always part of market research. Searching a wide variety of sources and compiling additional information provide greater insight to the research problem and supplement the primary data collected for a specific study. We have already discussed the availability of information inside the company, so let's turn our attention to external sources of secondary data.

***Government Sources*** Federal, state, and local governments are an important resource in collecting information on a variety of topics. For example, the U.S. Census Bureau publishes a library full of reports on business and consumer demographic trends. In 2012, the Census Bureau released the most recent Economic Census providing an in-depth analysis of business activity in the United States. Often, data are available by zip code, which can be useful for marketers in targeting specific groups of people. Updated Census Bureau data is set for release in 2019. States also publish additional data on economic activity. Finally, local governments publish records such as business licenses as well as general economic activity in that area. Governments provide a great deal of information on a variety of activities. From here marketers can identify areas, even down to specific streets, and get detailed demographic information, which is very useful in a number of ways including targeted marketing communications campaigns.

***Market Research Organizations*** A number of market research organizations publish data helpful to marketers. One resource many people are familiar with is Nielsen Media Research's TV ratings. The ratings are the basis for establishing national, cable, and local advertising rates. Another service well known to automobile enthusiasts is the J.D. Power automobile quality and customer satisfaction rankings. While automobile manufacturers pay a fee for more detailed information, the public has access to the overall rankings.

Other organizations publish data that can be useful to marketers in particular industries. For example, MMGY Global publishes several reports on both the leisure and business travel markets every year. These reports profile travel patterns and market segments in the travel industry. They are very useful for any business connected to the travel industry such as airlines, hotels, and cruise lines.

There are also information data services such as Information Resources, InfoScan, and Nielsen's ScanTrack that track scanner data from thousands of retailers. These organizations match sales data with demographic records to give a detailed picture of how well a product is doing in a particular area or within a certain target market. This information is useful for consumer products companies that want to assess the success of specific marketing activities (for example, how well an advertising campaign is working with a target market).

***The Internet*** It is now possible to access a huge amount of information using search engines to identify hundreds, even thousands, of information sources. Care should be taken, however, to evaluate the validity of the data and the reliability of the source. Generally two kinds of data sources can be found on the Internet. The first is market research organizations (such as the ones we just discussed) willing to share or sell market data. A second source is "general knowledge" sites such as business publications, academic research sites, or other independent sources that have data applicable to the research problem.[26]

***Advantages and Disadvantages of Secondary Data Sources*** As we discussed earlier, secondary data are almost always the first place to go in conducting a market research project. Even if primary data are collected, it is a good idea to see what has been done already that may be applicable now. Secondary data come with two primary advantages. First, it's a fast way to get information. Just a few minutes on a search engine can yield a lot of information. Of course, it takes much longer than that to look through it all. A second and related advantage is cost. Secondary data are relatively less expensive. Even if a company chooses to subscribe to organizations such as J.D. Power and Associates, thereby getting access to more detailed data, it is still more cost-effective than conducting a primary research study.

Of course, there are very distinct disadvantages. First and most important, secondary data will, almost by definition, not fit the research problem exactly. As a result, a specific answer to the research problem will not be possible using secondary data alone. Second, secondary data are not current. Sometimes the information may be only a few weeks or months old, or it may be dated to the point where it is no longer useful for the current project. Third, without a clear understanding of the methodology used to collect and interpret the secondary data, one should be a little skeptical about its validity.[27]

## Collect the Data

Now it is time to find and engage the respondent to collect the data. Data collection involves access and distribution of the survey to the respondent, then recording the respondent's responses and making the data available for analysis. A company can choose to collect the data using its own resources or hire a market research firm to administer the data collection. The choice often depends on the company's internal expertise in market research as well as the resources required to complete the job.

This stage in the market research process presents several unique challenges. First, data collection is often the most costly element in the market research process. Second, the greatest potential for error exists as data are collected.[28] For example, respondents may not respond to certain questions or may fill out the survey incorrectly. Finally, the people collecting the survey may be biased or make mistakes.

Technology, in the form of online surveys, can help to mitigate some of the issues with data collection. For example, electronic survey methods are often more cost-effective than other survey methodologies. In addition, there is less chance of transcription error as no one has to input the data into a computer. Unfortunately, not everyone has access to a computer. As a result, certain target markets may be underrepresented if a survey requires completion of an online survey. Additionally, people may still input inaccurate responses.[29] We will talk about online research tools in the next section.


Photodex ProShow Gold is one of many software packages designed to enhance presentations. The presentation of a research report often includes sophisticated software designed to clearly present research findings and recommendations.

Source: Photodex Corporation

## Analyze the Data

Once the data are collected, coded, and verified, the next step is to analyze the information. The appropriate analysis is performed based on the research questions developed at the beginning of the research. A common mistake is using unsuitable analyses that are not supported by the data.

Analysis of the data will lead to findings that address the research questions. These findings are, in a sense, the "product" of the research. In most cases, researchers will also interpret the findings for decision makers.

## Report the Findings

The best research projects are only as good as the final report and presentation. If the research is done well but the report is poorly written and presented, managers will not benefit from the research. Exhibit 4.8 provides a basic framework for a research report. Note that, for managers, the key section of the report is the Executive Summary as it presents a summation of the analysis and essential findings. Keep in mind that managers are not really interested in the number of secondary data sources, the questionnaire design, or the sampling plan; rather, they want to see the findings.

EXHIBIT 4.8 Outline of a Research Report

| | Short Report | | Long Report | |
|---|---|---|---|---|
| Report Modules | Memo or Letter | Short Technical | Management | Technical |
| Prefatory Information | | 1 | 1 | 1 |
| Letter of transmittal | | √ | √ | √ |
| Title page | | √ | √ | √ |
| Authorization statement | | √ | √ | √ |
| Executive summary | | √ | √ | √ |
| Table of contents | | | √ | √ |
| Introduction | 1 | 2 | 2 | 2 |

| | Short Report | | Long Report | |
|---|---|---|---|---|
| Problem statement | √ | √ | √ | √ |
| Research objectives | √ | √ | √ | √ |
| Background | √ | √ | √ | √ |
| Methodology | | √ (briefly) | √ (briefly) | 3 |
| Sampling design | | | | √ |
| Research design | | | | √ |
| Data collection | | | | √ |
| Data analysis | | | | √ |
| Limitations | | √ | √ | √ |
| Findings | | 3 | 4 | 4 |
| Conclusions | 2 | 4 | 3 | 5 |
| Summary and conclusions | √ | √ | √ | √ |
| Recommendations | √ | √ | √ | √ |
| Appendices | | 5 | 5 | 6 |
| Bibliography | | | | 7 |

Source: Cooper, Donald R. and Pamela S. Schindler, *Business Research Methods,* 12th ed. New York, NY: McGraw-Hill Education, 2014.

## Market Research Technology

Market research has benefited from better, more cost-effective technology. The use of powerful software tools and online technologies brings research to any level in the organization. Sales managers can survey customers, analyze the results, and make decisions without costly, time-consuming external studies. Sophisticated software incorporating CRM and marketing decision support systems can do in-depth analyses that offer unique insights about customers or market trends not possible just a few years ago. In most respects, making market research tools available throughout the company has been a big success. Unfortunately, as the access to market research technology has increased, so has the misapplication of the technology. Without implementing the market research process presented earlier, no amount of technology can create worthwhile results.

**LO 4-6**

Illustrate current research technologies and how they are used in market research.

### Online Research Tools

Online research tools fall into three categories: databases, focus groups, and sampling. Each of these three categories offers unique opportunities to expand the reach and usefulness of market research. Let's examine each more closely.

***Online (Cloud) Databases*** An online database is data stored on a server that is accessed remotely over the Internet or some other telecommunications network. Many, if not most, companies now have databases available to employees, suppliers, even customers. Information on orders, shipments, pricing, and other relevant information is available to salespeople and customer service personnel who need to access it.[30]

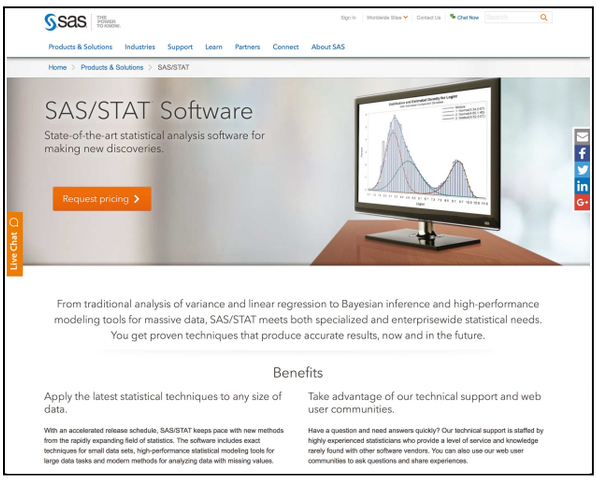
Independent online databases available from government and other sources are extremely useful tools in market research. Organizations such as the National Archives and Records Administration offer a wide range of databases with topic-specific data, all of which can be accessed for free. Fee-based services, while expensive, offer access to a wide range of information. Lexis/Nexis, for example, enables market researchers to access thousands of business and trade publications and market studies. Another company, IBISWorld, allows members to access hundreds of

industry overviews and analyses that have been conducted through research. These services make it possible to review market research reports, industry and company analyses, even market share information.[31]

***Online Focus Groups*** The virtual focus group is becoming a viable alternative to the traditional focus group format (6 to 10 people in a room). Offering distinct advantages in terms of convenience and cost-efficiency, online focus groups provide data quickly and in a format that is usually easier to read and analyze. Traditional focus groups require someone to transcribe the spoken words into a transcript. With online focus groups, everything is already recorded by computer. With the increased use of mobile devices, it is even easier to conduct online focus groups and collect data even as the customer is experiencing the product or service.[32]

The primary disadvantage of online focus groups is that participants are limited to those with access to a computer or workstation. In addition, as people often participate remotely, it is not possible to verify who is actually responding to the questions. Measures can be employed to verify participation (for example, passwords), but the reality is that, in most cases, you must rely on the individual to be honest. One final problem is the lack of control over the environment. Traditional focus groups create an environment where participants are required to focus on the questions. Online focus groups enable participants to be at home, work, or even a remote location with wireless access. As a result, participants can become distracted and environmental factors can affect their concentration and responses.

***Online Sampling*** If someone has access to a computer with an Internet connection, that person can complete a questionnaire. Online sampling has become increasingly popular as a data collection methodology. As with online focus groups, the primary advantages are convenience and cost-efficiency. Respondents are free to complete the survey when it is best for them, and sending a survey online is essentially free. Online survey companies such as QuestionPro offer a complete service from survey design and a variety of delivery methods (traditional e-mail, popup surveys, company newsletter integration, and others) to data analysis and presentation of findings.




SAS offers powerful analysis tools to help managers more clearly understand market data.

Source: SAS Institute Inc.

## Statistical Software

One of the real benefits of market research technology today is the ability to put powerful statistical software in the hands of front-line managers. With the proper training and data, it is now possible for managers to conduct analyses that were not possible even five years ago. Two software packages dominate desktop statistical analysis—IBM SPSS and SAS. IBM SPSS offers a range of marketing analytical tools. Its statistical software combines an easy-to-use interface with powerful statistical tools in a format that managers at all levels can use. The other widely used package is called SAS, and it offers many of the same features. One of the real advantages of these packages is their ability to take the findings of the data analysis and create tables and reports.[33]

Interestingly, while dedicated statistical packages offer powerful analytical tools and outstanding reporting capabilities, probably the most widely used tool for analyzing business data is one almost everyone already has on his or her computer—Excel spreadsheets. Part of the Microsoft Office suite of products, Excel offers the ability to analyze data using formulas created by the user or statistical functions already embedded in the software. While not a dedicated statistical package, it is certainly a useful tool in basic data analysis.

# Market Research Challenges in Global Markets

The primary difference between domestic and international research is that international market data are more difficult to get and understand than domestic data. In most Western European countries and the United States, it is much easier to access quality data than in the rest of the world. Let's examine some of the challenges market researchers face in finding, collecting, and then analyzing market data in foreign markets.

## Secondary Data

Exhibit 4.9 identifies the ten most expensive countries for marketing research. Note that while the United States and, to a lesser extent, Japan and the European Union are data-rich market environments, they are also among the most expensive countries in which to conduct marketing research. Unfortunately, that level of information is not found anywhere else in world. In certain areas, such as Central Europe, this is because they have only recently moved to open market economies. In other parts of the world, such as China and India, the culture does not encourage the free flow of information. This makes it difficult for any organization, even governments, to collect good information. Let's consider three major challenges researchers face as they collect data around the world.

EXHIBIT 4.9 The Ten Most Expensive Countries for Research

| Country | Global Index Scale |
|---|---|
| United States of America | 241 |
| Switzerland | 239 |
| Canada | 229 |
| Japan | 222 |
| United Kingdom | 187 |
| Sweden | 168 |
| Germany | 165 |
| Denmark | 162 |
| France | 161 |
| The Netherlands | 156 |

Source: "US the Most Expensive Country for Market Research," *Marketing Charts*, October 17, 2014.

***Data Accessibility*** In the United States, businesspeople are accustomed to easily accessing information that simply does not exist in much of the world. The U.S. Census Bureau provides detailed information across a wide range of business sectors, including retailing and distribution, as well as specific data on many different economic and personal criteria such as income per capita, population by county, and zip code (broken down by gender, age, ethnic mix, and many other characteristics). From government sources (U.S. Census Bureau, Department of Commerce, EU Business Development Center), nongovernment business organizations (U.S. Chamber of Commerce, OECD), and private research organizations, a great deal of information is available to managers. The quantity and quality of data found in the United States are not available in most of the world.

***Data Dependability*** A second major issue is the reliability of the data. Can the information be considered accurate? Regrettably, in many cases it cannot. Govrnment agencies, particularly in developing countries, will distort data to present a more favorable analysis. The data are often reported incorrectly because people do not want the government to know the true figures, usually because of higher tax concerns. In other cases, governments want to present optimistic results that support government policies, so they alter the data to reflect government accomplishments.

***Data Comparability*** Comparing secondary data from foreign markets risks three other problems. First, developing countries often lack historical data, making it much harder to assess long-term economic or business trends. Second, the available data are outdated so they are ineffective for making decisions in the current economic environment. Finally, terms used in reporting information are not consistent. Standardized business terminology used in industrialized countries has not been adopted by many developing regions, making it difficult for researchers to interpret data.

## Primary Data

Essential information about economic and general business trends can be gathered from secondary sources, but to get specific market data such as customer preferences, primary data are necessary. Collecting primary data pre-

sents many challenges for marketers that are almost always compounded in global markets. Some of the specific problems of international primary data collection include the following issues.

***Unwillingness to Respond*** Cultural, gender, and individual differences create wide disparities in the willingness to provide personal information. The United States has an open information culture and people are much more willing to respond, but this openness is not shared around the world. In addition, government agencies such as the Securities and Exchange Commission require publicly traded companies to provide accurate business information including valid financial results. Nongovernment agencies such as trade associations report studies widely used in business. The National Realtors Association, for example, publishes quarterly data on the housing industry that is considered an accurate assessment of the real estate market in the United States.

As we discussed earlier, many people don't respond because they are concerned about government interference or additional taxes. However, concerns about privacy and how personal data are used generate a broad distrust of surveys among consumers and businesses. It is not difficult to understand these concerns. In countries formerly under the control of the Soviet Union (Czech Republic, Poland, Hungary, and others), for example, people were concerned that personal information provided to authorities could be used against them. After the fall of the Soviet Union, the historical problems created by decades of living in a closed society made it very difficult for companies such as A.C. Nielsen to collect valid consumer opinions and business data.

***Unreliable Sampling Procedures*** Related to the quality of data noted earlier is the problem of unreliable or inadequate demographic information to conduct primary research. In many countries, there is no way to locate or identify who lives where or even how many people live in a given location, something businesspeople in the United States take for granted. In the United States, sophisticated global positioning system (GPS) devices can direct people to specific locations based on maps and other data stored on a hard drive. Consider the problem, then, if you are in a medium or small South American or Asian city where maps do not exist and street names are not even posted. The lack of reliable census information coupled with an inadequate infrastructure leaves market researchers in many countries with no accurate sampling frame from which to draw respondents.

***Inaccurate Language Translation and Insufficient Comprehension*** Getting people in global markets to actually complete a survey presents three challenges. First, simply translating surveys can be a challenge. For example, Chinese is written with characters known as hànzi, with each character representing a syllable of spoken Chinese with its own meaning. To read fluently in Chinese requires knowledge of more than 3,000 symbols. Second, word usage changes dramatically around the world. In the United States and Western Europe, "family" generally refers to the immediate family unit, including a father, mother, and their children, while in many Latin and Asian cultures "family" almost always includes the extended family, including all aunts, uncles, cousins, and grandparents. When a survey asks about family members, then, the responses could vary dramatically.

A final problem is insufficient language comprehension. In many parts of the world illiteracy rates are high, which rules out most survey methodologies. In addition, some countries use multiple languages, making translation costly and increasing the likelihood of mistranslation. India, for example, recognizes 14 official languages, with many additional nonofficial languages. Imagine writing a survey that would translate well into over a dozen languages.

# SUMMARY

Marketers know that accurate, relevant, and timely information is an essential element in marketing management. There are two sources of information: that which comes from outside the company and that which can be found internally. Being aware of environmental forces such as demographic profiles and changes, economic conditions, emerging technologies, changes in the natural world, and the political and legal environment enables marketers to create more effective short- and long-term marketing strategies.

Critical to assessing marketing information is a thorough understanding of the market research process. The process involves six specific steps: define the problem, establish the research design, search secondary sources, collect the data, analyze the data, and present the research findings. Researchers must follow the market research process to ensure the data are valid and useful for decision makers.

# KEY TERMS

market information system (MIS)

marketing intelligence

demographics
microeconomics
macroeconomics
market research
management research deliverable
research problem
exploratory research
descriptive research
causal research
primary data
secondary data
qualitative research
quantitative research
focus group
in-depth interview
surveys
behavioral data
observational data
mechanical observation
open-ended questions
closed-ended questions
census
sample
probability sampling
nonprobability sampling
data collection
online database

## APPLICATION QUESTIONS

1. Imagine you are the vice president of sales for a large security company and you have been asked to put together a sales information system that collects, analyzes, interprets, and distributes information from the sales force. How would you do it? What information would you ask salespeople to collect?
2. As a market manager at Lenovo, what key information from outside the company would be important to help in the design of a new laptop for small and medium-sized businesses?
3. The marketing manager for Disney Cruise Line wants to know what demographic trends will affect the cruise line business over the next five years. What kind of research is needed to address this question? Conduct some secondary research and try to identify two or three important demographic trends that might affect the cruise line business.
4. The market research director for John Deere has just received a call from the marketing manager in the company's lawn tractor division. The manager wants to know how the new advertising campaign is being received by current customers. Design a research study for this research. Be sure to include a problem definition and research design.
5. The alumni director at your institution wants to know how to serve the alumni better. Design a survey of no more than 10 questions that the alumni director can use to ask alumni about their interest in getting more involved with their school.

## MANAGEMENT DECISION CASE

### BMW's Road to Higher Customer Satisfaction: Just Tell Me What You Think!

Customer satisfaction and loyalty are critical elements in any successful marketing strategy, but they are essential when the product is purchased only once every few years. It was, therefore, of great concern to luxury automakers like Acura, Audi, and BMW when in 2014 their customer satisfaction scores all dropped below the average for the entire automobile industry.[34] For years these companies had been gathering and using external primary data from their own surveys, and also relying on secondary data from sources like the American Consumer Satisfaction Index, yet satisfaction was falling. Assuming the luxury automakers were listening and responding to the data they received from existing research, it appeared the old modes of research were missing key insights. Management had a new research deliverable—learn how we can improve customer satisfaction—and a new research question—what specific product attributes or service components are not satisfying our customers?

In situations like this, you don't know what you don't know. Were less-expensive competitors adding features that satisfied customers at a lower price? Were service amenities like free loaner cars not valued by the customers? What were the features or service components that were failing, missing, or just not valued? Finding a method to ask questions that exposed areas of dissatisfaction (or missed opportunities to satisfy), and ask these questions in a way that was representative of the target customers, became the market research problem. One of these companies—BMW—learned how to listen and greatly improved its customer satisfaction scores. It now ranks above the industry average for customer satisfaction and higher in satisfaction than its luxury automobile competitors.[35] BMW's focus on understanding its customers has helped it reach the top of its market, but its path was only possible with an understanding of important trade-offs different types of marketing research require.

Through a worldwide dealer network, BMW makes 10 promises to its customers and then measures how well the company (and dealers) keep those promises. Walk into (or visit on the web) nearly any BWM dealership, from Idaho Falls, Idaho, to Hastings, New Zealand, and you will see a display of the 10 promises of service quality.[36] What you don't see is how difficult it is to measure and make sense of hundreds, thousands, or, at a country level, hundreds of thousands of opinions about customers' satisfaction with activities such as response timeliness, explaining the bill, or offering a test drive.

In an effort to gather better satisfaction information, BMW UK set about to solve two problems at once. Like most companies, it had a difficult time getting customers to respond to its surveys.[37] And, with 10 promises to measure, the surveys were fairly long and time-consuming to complete. This led to a falloff in customer response rates. The second problem was making sense of the incoming survey data. To make surveys easier for respondents and for later analysis, market researchers use closed-ended quantitative questions, typically with a one-to-five- or one-to-seven-point scale of very unsatisfied to very satisfied. Customers who responded answered by bubbling in the appropriate number on their survey. But, without context as to why they were very satisfied (or not), it was difficult for BMW to know exactly what to keep doing and what to fix. More context meant more questions, and more questions meant fewer responses.

To address this problem and get deeper context, market researchers often seek to gather deeper, qualitative information through in-depth interviews, which are often one on one and quite expensive to administer, or by inviting a small number of customers (usually around a dozen) to a focus group, where a professional moderator asks open-ended qualitative questions, digging out nuances of why customers are expressing a given level of satisfaction. One downside of both in-depth interviews and focus groups is that they are not a statistically valid representation of the population of interest (for example, a target segment such as Lexus buyers). BMW recognized that focus groups enable the company to gain deeper context and actionable insights through qualitative data but do not allow for generalizing the findings to a large group, so they only provide guidance on what should be focused on in a broader, statistically valid study.

BMW faced what is, for all market researchers, a series of trade-offs between different research methods. Qualitative methods, such as focus groups, brought deeper insights, but at the cost of being able to apply the findings to a more general customer target. Other methods, such as quantitative surveys, brought speed, generalizability, and a higher level of numerical precision and statistical validity, but lacked an ability to delve deeper and understand the heart of what customers value. And, in both cases, the more information BMW sought, the fewer customers responded. Realizing a need for richer and more representative information, BMW set out to find a way to analyze representative samples of large amounts of open-ended qualitative customer responses.

## Questions for Consideration

1. Assuming BMW wants to learn more about what customers value in a luxury driving experience, and then make decisions based on that research, what kind(s) of market research would you recommend that might improve BMW's understanding?
2. BMW is facing the classic quality–quantity–cost trade-off; when it seeks higher-quality information (represented by more questions), fewer responses are received or research costs are higher. Since BMW's executives all have 25 to 30 years of experience in the automotive market, what would be the advantages and disadvantages of trusting their own experience versus spending more on market research?
3. When problems develop, like what BMW is experiencing in its research data gathering, a new, often technological solution is developed to address the issue. What might be some innovative ways to approach gaining both statistical significance (through higher response rate) and deeper context (through open-ended qualitative data)?

# MARKETING PLAN EXERCISE

## ACTIVITY 3: Identify Critical Information

This exercise asks you to identify the critical information needed to create the marketing plan. In that regard it is important to evaluate existing information (internal and secondary data) as well as new information gathered through primary research. This assignment includes:

1. Catalog internal sources of information available to you inside the organization and what information you will receive from each source.
2. Identify secondary data sources and the specific information you need from each source.
   a. List sources.
   b. Date.
   c. Assess the relevance of the data to the project.
3. List primary data needs to create the marketing plan. Then develop the specific instruments (focus group questions, surveys) that you will use later in the marketing plan.

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