When You Finish This Chapter, You Should

1. Know who the business and organizational customers are.

2. See why multiple influence is common in business and organizational purchase decisions.

3. Understand the problem-solving behavior of organizational buyers.

4. Understand the different types of buyer–seller relationships and their benefits and limitations.

5. Know the basic e-commerce methods used in organizational buying.

6. Know about the number and distribution of manufacturers and why they are an important customer group.

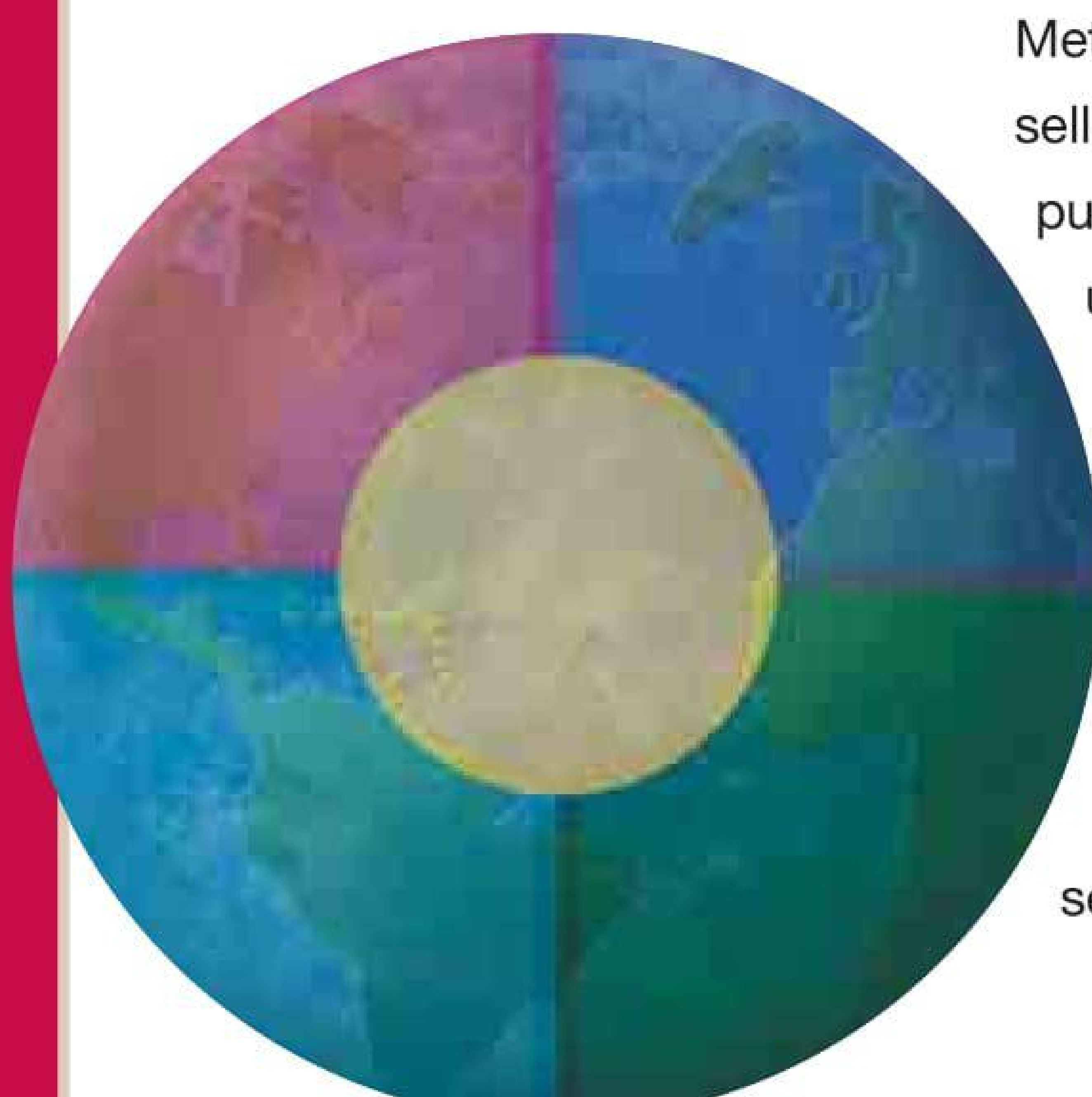
7. Know how buying by service firms, retailers, wholesalers, and governments is similar to—and different from—buying by manufacturers.

8. Understand the important new terms (shown in red).

Chapter Seven

Business and Organizational Customers and Their Buying Behavior

MetoKote Corp. specializes in protective coatings, like powder-coat and liquid paint, that other manufacturers need for the parts and equipment they make. For example, when you see John Deere (JD) agricultural or construction equipment, its familiar green finish probably came from MetoKote. In fact, John Deere and MetoKote have a close buyer–seller relationship. While purchasing managers at Deere use Internet portals to identify suppliers and get competitive bids for many items they need, it's different with MetoKote. Deere isn't going to switch to some other supplier just because an Internet search identifies some cheaper



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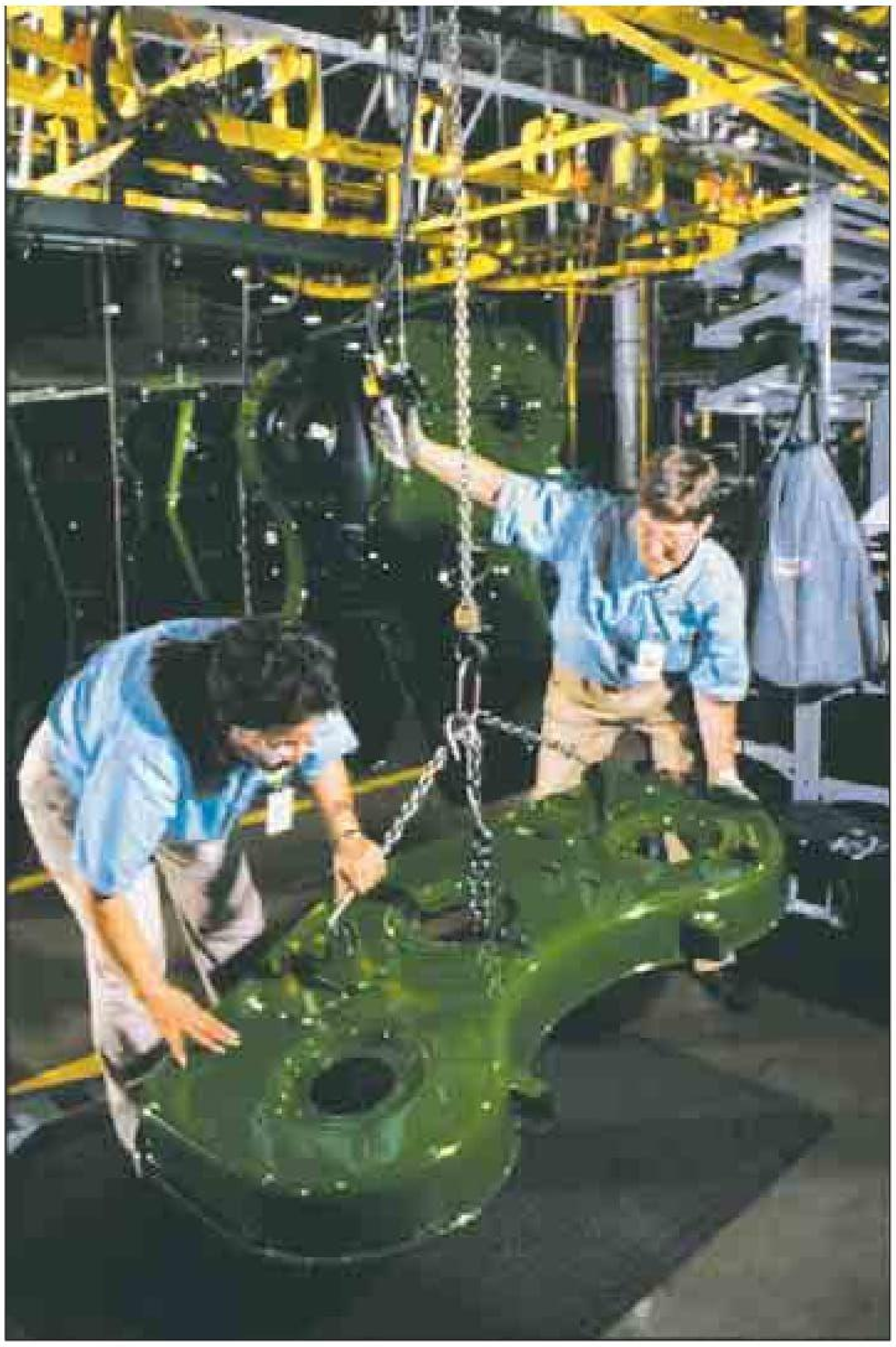


coating. MetoKote doesn't just supply Deere with coatings; it handles the whole coating job for Deere. In fact, it has built facilities right next to some Deere plants. When it's time for a part to be coated, a conveyer belt moves it out of the JD plant and into the MetoKote facility. Four hours later it's back—and it's green. The decision to purchase coating services this way wasn't made casually and many people were involved. JD's production people favored this arrangement. They let MetoKote's experts keep up with all of the environmental regulations and new technologies for coatings, so Deere can worry about what it does best. Deere's finance people liked the idea that a Deere plant could be smaller and less costly to build and maintain if it didn't need space for big spray booths. Because MetoKote does not have to ship the parts to Deere after they are coated, there are fewer scratches and dents—which the quality people like. And the purchasing people don't have to worry about parts being there when they're needed. Of course, this was not a simple sale for MetoKote—and on an ongoing basis many people cooperate and share information to make it work for both firms.

John Deere needs high-quality protective finishes because the buyers for its customers want durable, long-lasting equipment. Like Deere, they want good value from their suppliers. That means that marketers at Deere need to think about the quality of Deere service as well as the quality of Deere equipment. For example, when a huge commercial farm in California or Brazil needs a repair part they can't afford delays. Deere helps them, and the dealers who sell its parts and equipment, with information technology. At any hour an equipment customer can check Deere's website (www.deere.com) to see which dealers have a needed part in inventory, to check the price, and to place an order for fast delivery. But helping its customers earn better profits in their own operations doesn't stop there. For example, some Deere farm equipment includes global positioning devices that track exactly where the equipment goes. That makes it possible for the owner to use JD's Vantage-Point Network to collect, store, and interpret detailed data generated by their farming operations online, right down to creation of maps of fields that need to be plowed, seeded, or cut. It is benefits like this that make Deere the supplier of choice for many business customers.[1]

Business and Organizational Customers—A Big Opportunity

Most of us think about individual final consumers when we hear the term *customer.* But many marketing managers aim at customers who are not final consumers. In fact, more purchases are made by businesses and other organizations than by final consumers. As the John Deere case illustrates, the buying behavior of these organizational customers can be very different from the buying behavior of final consumers. Developing marketing strategies for these markets requires a solid understanding of who these customers are and how they buy. That is the focus of this chapter.

What types of customers are involved?

Business and organizational customers are any buyers who buy for resale or to produce other goods and services. Exhibit 7-1 shows the different types of customers in these markets. As you can see, not all of the organizational customers in these markets are business firms. Even so, to distinguish them from the final consumer market, managers sometimes refer to them collectively as the "business-to-business" market, or simply the *B2B market*.

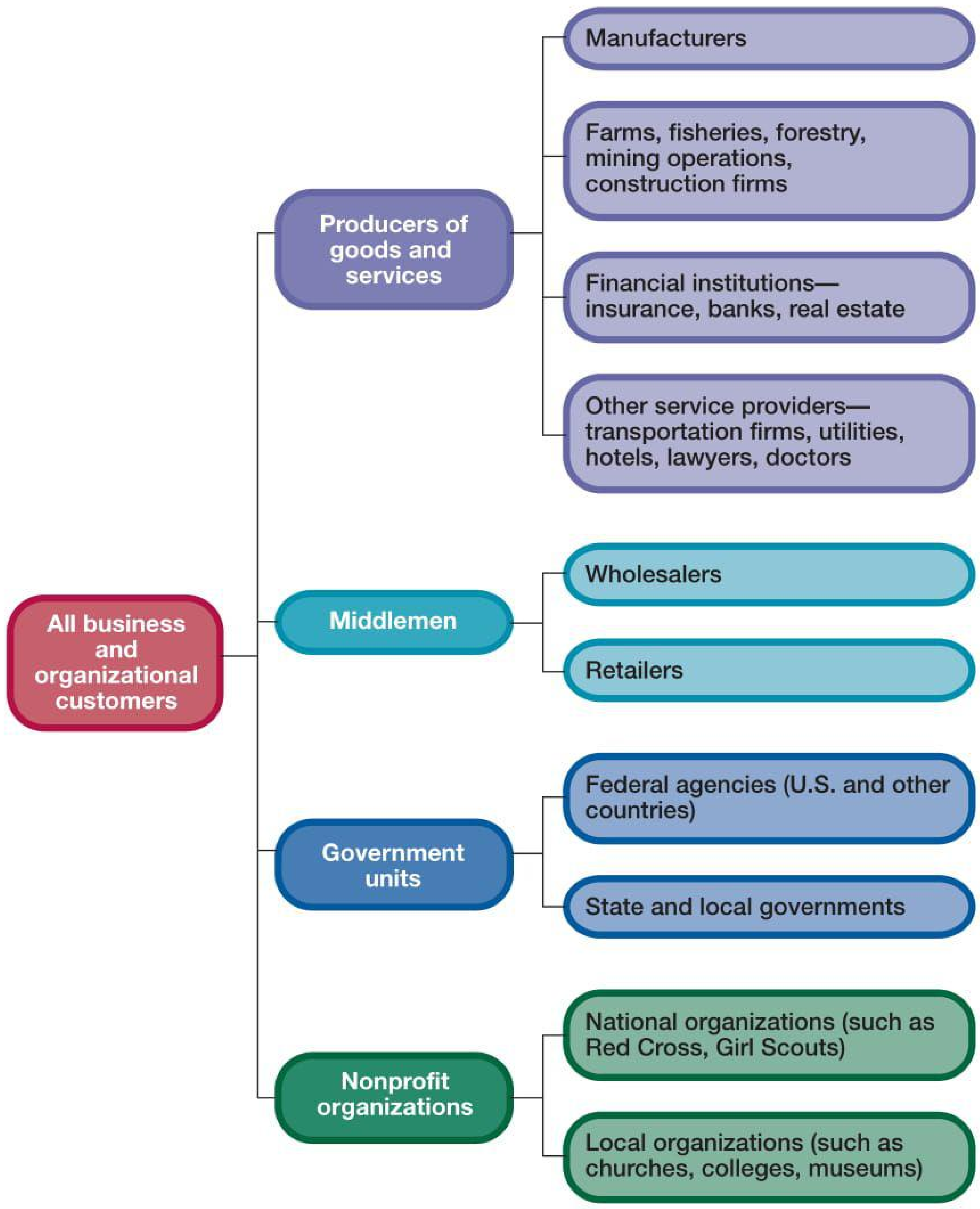
Many characteristics of buying behavior are common across these varied types of organizations. That's why the different kinds of organizational customers are sometimes loosely called "business buyers," "intermediate buyers," or "industrial buyers." As we discuss organizational buying, we will intermix examples of buying by many different types of organizations. Later in the chapter, however, we will highlight some of the specific characteristics of the different customer groups.

Organizational Customers Are Different

Organizations buy for a basic purpose

Like final consumers, organizations make purchases to satisfy needs. But it's often easier to understand an organization's needs because most organizations make purchases for the same basic reason. They buy goods and services that will help them meet the demand for the goods and services that they in turn supply to their markets. In other words, their basic need is to satisfy their own customers and clients. A producer buys because it wants to earn a profit by making and selling

Exhibit 7-1
Examples of Different Types of Business and Organizational Customers



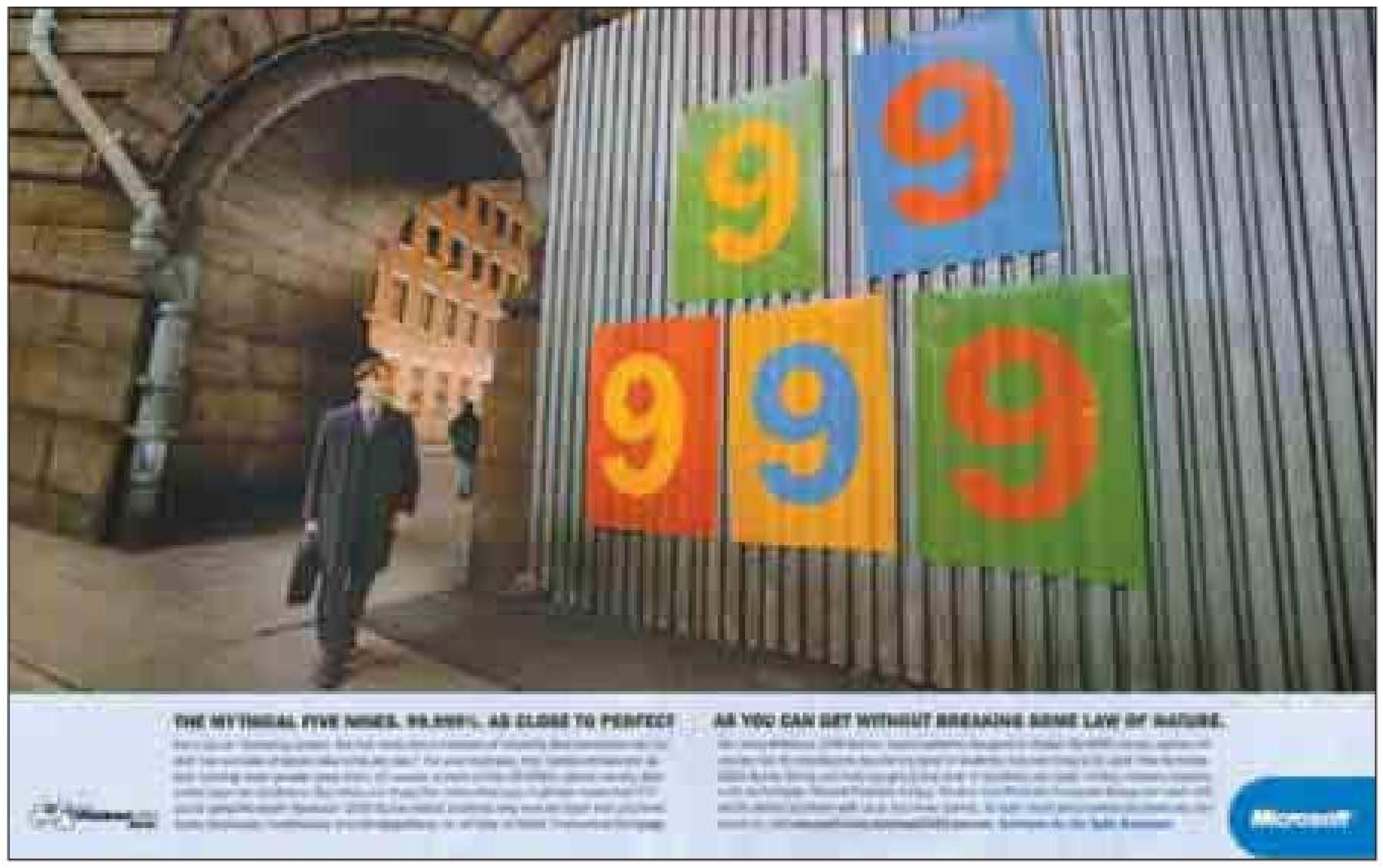
goods or services. A wholesaler or retailer buys products it can profitably resell to its customers. A town government wants to meet its legal and social obligations to citizens. Similarly, a country club wants to help its members enjoy their leisure time.

Basic purchasing needs are economic

Organizational buyers typically focus on economic factors when they make purchase decisions. They are usually less emotional in their buying than final consumers.

Buyers try to consider the total cost of selecting a supplier and its particular marketing mix, not just the initial price of the product. For example, a hospital that needs a new type of X-ray equipment might look at both the original cost and ongoing costs, how it would affect doctor productivity, and of course the quality of the images it produces. The hospital might also consider the seller's reliability and general cooperativeness; the ability to provide speedy maintenance and repair, steady supply under all conditions, and reliable and fast delivery; and any past and present relationships (including previous favors and cooperation in meeting special requests).

The matter of dependability deserves further emphasis. An organization may not be able to function if purchases don't arrive when they're expected. For example,



Business customers usually focus on economic needs when they make purchase decisions, so Microsoft wants top decision makers to realize that its reliable server software eliminates downtime costs because it is up and running 99.999 percent of the time.

there's nothing worse to a manufacturer than shutting down a production line because sellers haven't delivered the goods. Dependable product quality is important too. For example, a bug in e-commerce software purchased by a firm might cause the firm's online order system to shut down. The costs of finding and correcting the problem—to say nothing about the cost of the lost business—could be completely out of proportion to the original cost of the software.

Even small differences are important

Understanding how the buying behavior of a particular organization differs from others can be very important. Even seemingly trivial differences in buying behavior may be important because success often hinges on fine-tuning the marketing mix.

Sellers often approach each organizational customer directly, usually through a sales representative. This gives the seller more chance to adjust the marketing mix for each individual customer. A seller may even develop a unique strategy for each individual customer. This approach carries target marketing to its extreme. But sellers often need unique strategies to compete for large-volume purchases.

In such situations, the individual sales rep takes much responsibility for strategy planning. The sales rep often coordinates the whole relationship between the supplier and the customer. That may involve working with many people—including top management—in both firms. This is relevant to your career planning since these interesting jobs are very challenging, and they pay well too.

Serving customers in international markets

Many marketers discover that there are good opportunities to serve business customers in different countries around the world. Specific business customs do vary from one country to another—and the differences can be important. For example, a salesperson working in Japan must know how to handle a customer's business card with respect. Japanese consider it rude to write notes on the back of a card or put it in a wallet while the person who presented it is still in the room. But the basic approaches marketers use to deal with business customers in different parts of the world are much less varied than those required to reach individual consumers.

This is probably why the shift to a global economy has been so rapid for many firms. Their business customers in different countries buy in similar ways and can be reached with similar marketing mixes. Moreover, business customers are often willing to work with a distant supplier who has developed a superior marketing mix.

Steel bearings are a small portion of the cost of producing an airplane, but Timken wants decision makers to keep in mind that it's critical to get the proven quality of its products.

Specifications describe the need

Organizational buyers often buy on the basis of a set of **purchasing specifications**—a written (or electronic) description of what the firm wants to buy. When quality is highly standardized, as is often the case with manufactured items, the specification may simply consist of a brand name or part number. With products like agricultural commodities, where there is more variation, the specification may include information about the grade of the product. Often, however, the purchase requirements are more complicated; then the specifications may set out detailed information about the performance standards the product must meet. Purchase specifications for services tend to be detailed because services tend to be less standardized and usually are not performed until after they're purchased.

Customers may expect quality certification

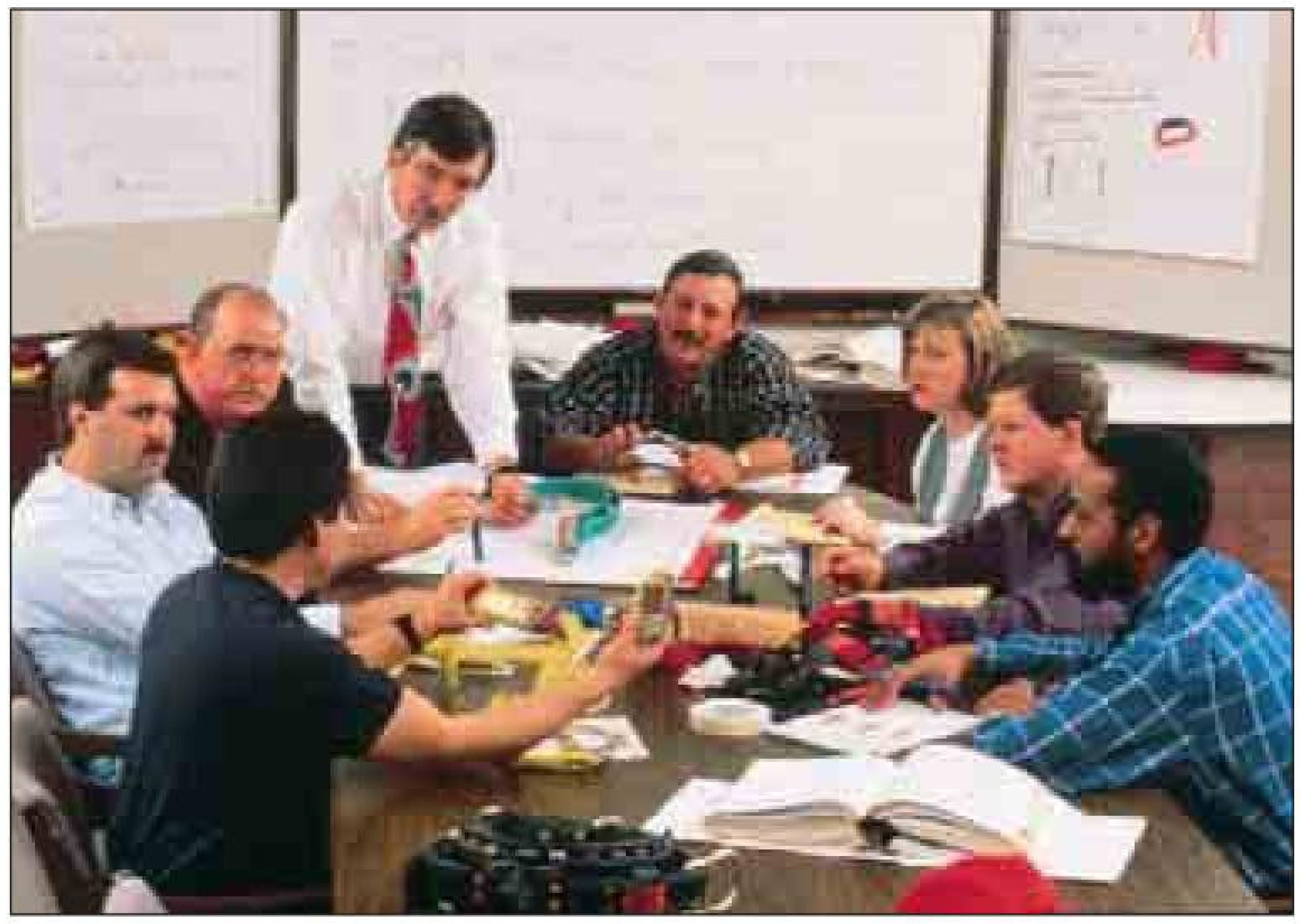
Organizational customers considering a new supplier or one from overseas may be concerned about product quality. However, this is becoming less of an obstacle because of ISO 9000. **ISO 9000** is a way for a supplier to document its quality procedures according to internationally recognized standards.

ISO 9000 assures a customer that the supplier has effective quality checks in place, without the customer having to conduct its own costly and time-consuming audit. Some customers won't buy from any supplier who doesn't have it. To get ISO 9000 certified, a company basically must prove to outside auditors that it documents in detail how the company operates and who is responsible for quality every step of the way.[2]

Many Different People May Influence a Decision

Purchasing managers are specialists

Many organizations, especially large ones, rely on specialists to ensure that purchases are handled sensibly. These specialists have different titles in different firms (such as purchasing agent, procurement officer, or buyer), but basically they are all **purchasing managers**—buying specialists for their employers. In large organizations, they usually specialize by product area and are real experts.



A person who works on a utility firm's high-power wires needs safe, durable climbing gear. A number of different people may influence the decision about which gear the firm should buy.

Some people think purchasing is handled by clerks who sit in cubicles and do the paperwork to place orders. That view is out-of-date. Today, most firms look to their purchasing departments to help cut costs and provide competitive advantage. In this environment, purchasing people have a lot of clout. And there are good job opportunities in purchasing for capable business graduates.

Salespeople often have to see a purchasing manager first—before they contact any other employee. These buyers hold important positions and take a dim view of sales reps who try to go around them. Rather than being "sold," these buyers want salespeople to provide accurate information that will help them buy wisely. They like information on new goods and services, and tips on potential price changes, supply shortages, and other changes in market conditions. Sometimes all it takes for a sales rep to keep a buyer up-to-date is to send an occasional e-mail. But a buyer can tell when a sales rep has the customer firm's interest at heart.

Although purchasing managers usually coordinate relationships with suppliers, other people may also play important roles in influencing the purchase decision.[3]

Multiple buying influence in a buying center

Multiple buying influence means that several people—perhaps even top management—share in making a purchase decision. Possible buying influences include:

1. *Users*—perhaps production line workers or their supervisors.
2. *Influencers*—perhaps engineering or R&D people who help write specifications or supply information for evaluating alternatives.
3. *Buyers*—the purchasing managers who have the responsibility for working with suppliers and arranging the terms of the sale.
4. *Deciders*—the people in the organization who have the power to select or approve the supplier—often a purchasing manager but perhaps top management for larger purchases.
5. *Gatekeepers*—people who control the flow of information within the organization—perhaps a purchasing manager who shields users or other deciders. Gatekeepers can also include receptionists, secretaries, research assistants, and others who influence the flow of information about potential purchases.

An example shows how the different buying influences work.

Exhibit 7-2
Multiple Influence and Roles in the Buying Center

Suppose Electrolux, the Swedish firm that produces vacuum cleaners, wants to buy a machine to stamp out the various metal parts it needs. An assistant to the purchasing manager does an Internet search to identify possible vendors. However, the list that the assistant (a gatekeeper) prepares for the manager excludes a few vendors on the basis of an initial evaluation of information from their websites. The manager e-mails a description of the problem to vendors on the list. It turns out that each of them is eager to get the business and submits a proposal. Several people (influencers) at Electrolux help to evaluate the vendors' proposals. A finance manager worries about the high cost and suggests leasing the machine. The quality control people want a machine that will do a more accurate job—although it's more expensive. The production manager is interested in speed of operation. The production line workers and their supervisors want the machine that is easiest to use so workers can continue to rotate jobs.

The company president (the decider) asks the purchasing department to assemble all the information but retains the power to select and approve the supplier. The purchasing manager's assistant schedules visits for salespeople. After all these buying influences are considered, one of the purchasing agents for the firm (the buyer) will be responsible for making recommendations and arranging the terms of the sale.

It is helpful to think of a **buying center** as all the people who participate in or influence a purchase. Different people may make up a buying center from one decision to the next. This makes the marketing job difficult.

The salesperson must study each case carefully. Just learning who to talk with may be hard, but thinking about the various roles in the buying center can help. See Exhibit 7-2.

The salesperson may have to talk to every member of the buying center—stressing different topics for each. This not only complicates the promotion job but also lengthens it. Approval of a routine order may take anywhere from a day to several months. On very important purchases—a new computer system, a new building, or major equipment—the selling period may take a year or more.[4]

Vendor analysis considers all of the influences

Considering all of the economic factors and influences relevant to a purchase decision is sometimes complex. A supplier or product that is best in one way may not be best in others. To try to deal with these situations, many firms use **vendor analysis**—a formal rating of suppliers on all relevant areas of performance. The purpose isn't just to get a low price from the supplier on a given part or service. Rather, the goal is to lower the *total costs* associated with purchases. Analysis might show that the best vendor is the one that helps the customer reduce costs of excess inventory, retooling of equipment, or defective parts.[5]

Internet

Internet Exercise At the Computer Discount Warehouse website (www.cdw.com) a buyer can compare the features and prices of alternative products. Click on "Notebooks" (under the PRODUCTFINDER heading) and then search for notebooks with a Processor Speed of at least 1GHz. Select two notebooks from two different manufacturers and click compare. How helpful would this analysis be if you were a computer buyer?

Behavioral needs are relevant too

Vendor analysis tries to focus on economic factors, but purchasing in organizations may also involve many of the same behavioral dimensions we discussed in Chapter 6. Purchasing managers and others involved in buying decisions are human, and they want friendly relationships with suppliers.

The purchasing people in some firms are eager to imitate progressive competitors or even to be the first to try new products. Such "innovators" deserve special attention when new products are being introduced.

The different people involved in purchase decisions are also human with respect to protecting their own interests and their own position in the company. That's one reason people from different departments may have different priorities in trying to influence what is purchased. Similarly, purchasing managers may want to avoid taking risks that might reflect badly on their decisions. They have to buy a wide variety of products and make decisions involving many factors beyond their control. If a new source delivers late or quality is poor, you can guess who will be blamed. Marketers who can help the buyer avoid risk have a definite appeal. In fact, this may make the difference between a successful and unsuccessful marketing mix.

A seller's marketing mix should satisfy *both* the needs of the customer company as well as the needs of individuals who influence the purchase. Therefore, sellers need to find an overlapping area where both can be satisfied. See Exhibit 7-3 for a summary of this idea.

Ethical conflicts may arise

Although organizational buyers are influenced by their own needs, most are serious professionals who are careful to avoid a conflict between their own self-interest and company outcomes. Marketers must be careful here. A salesperson who offers one of his company pens to a prospect may view the giveaway as part of the promotion effort—but the customer firm may have a policy against any employee accepting *any* gift from a supplier. For example, General Motors developed an ethics policy that forbids employees from accepting anything of value from a vendor. It specifically includes entertainment—like a golf outing, a steak dinner, or tickets to a sporting event.

Organizational customers want reliable suppliers who will deliver on their promises and not reflect badly on the buyer's decisions.

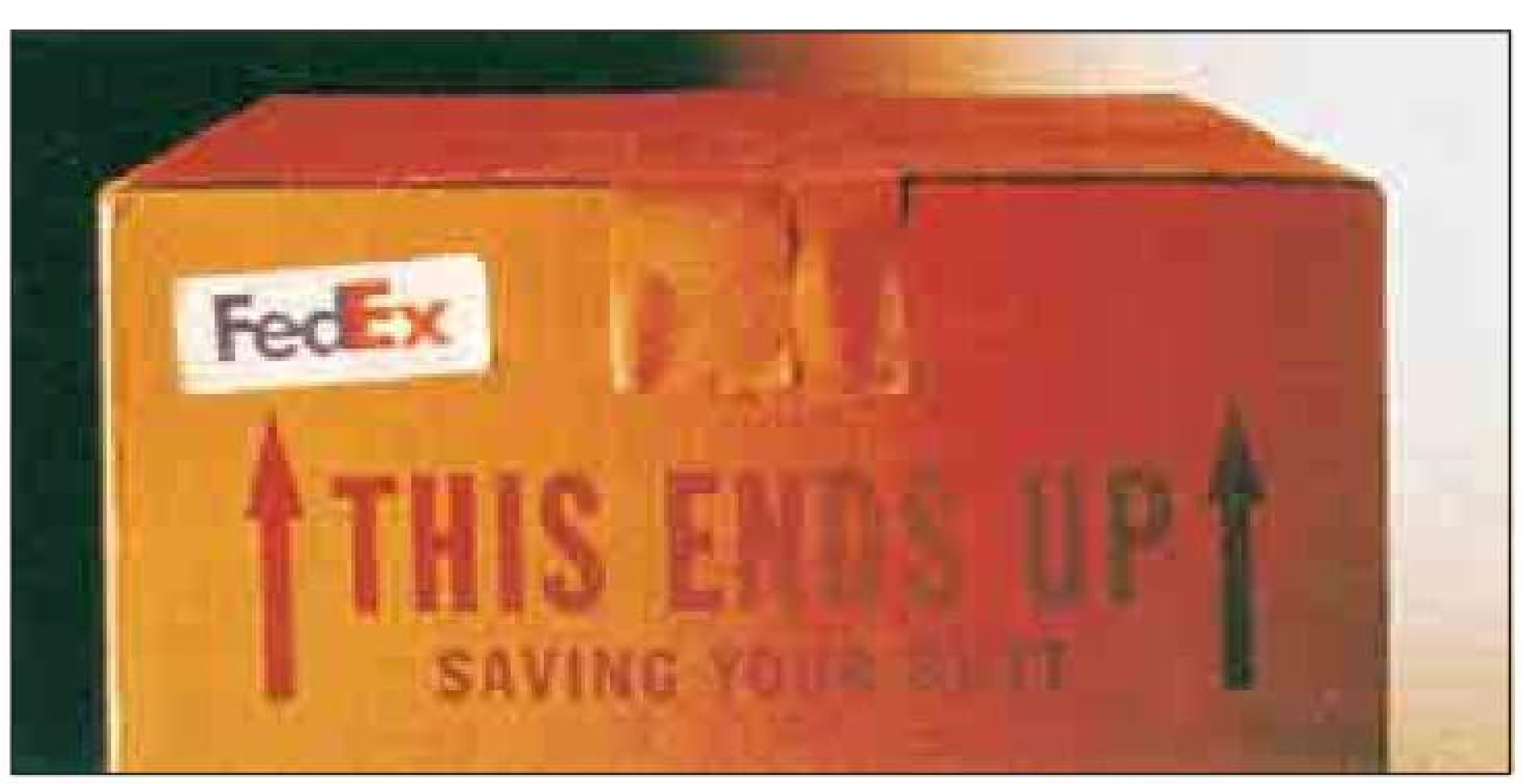
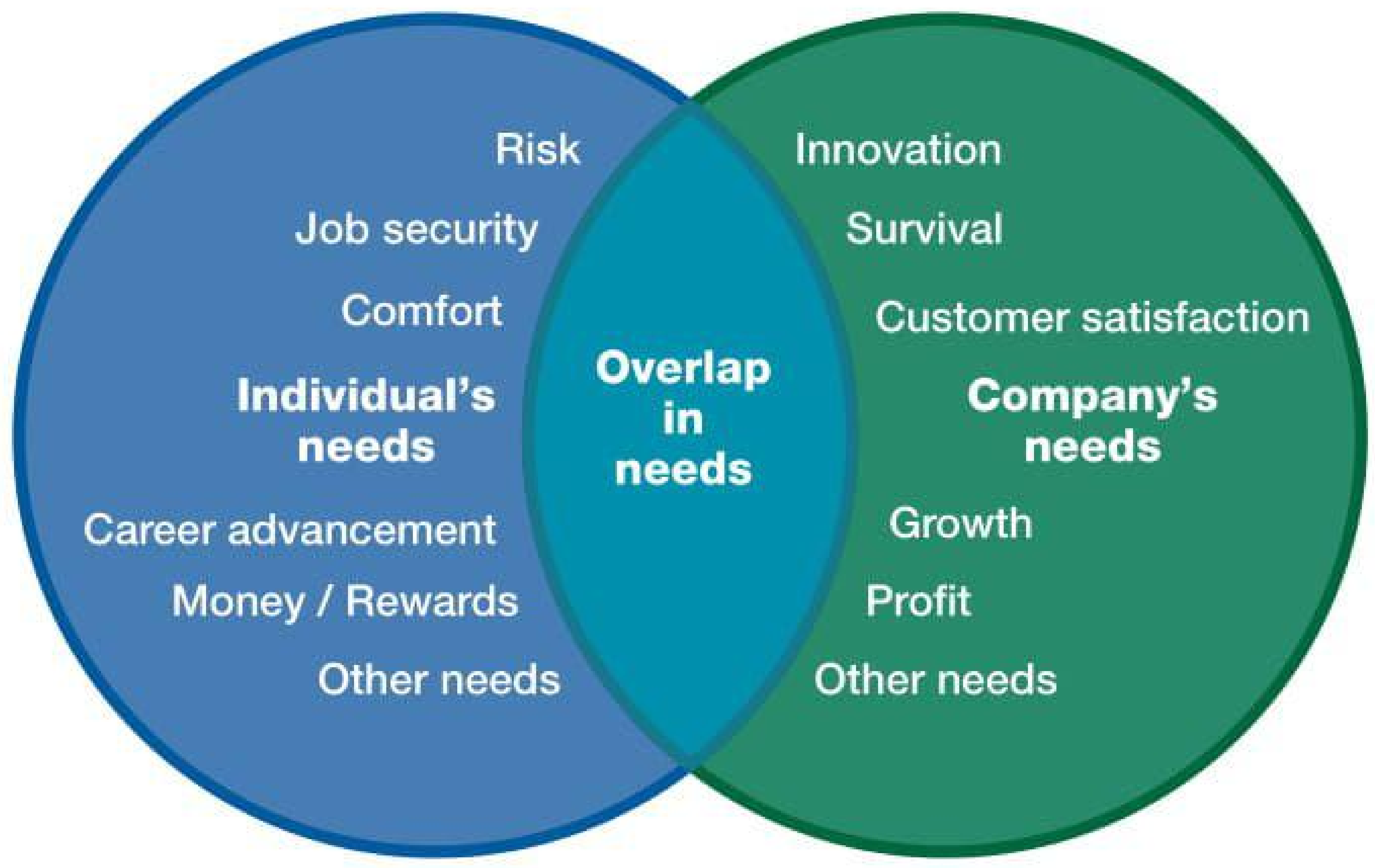


Exhibit 7-3
Overlapping Needs of Individual Influencers and the Customer Organization



Most organizational buyers do their work ethically and expect marketers to do the same. Yet there have been highly publicized abuses. For example, some members of the site selection committee for the 2000 Olympic Games asked for personal gifts that may have influenced where the games were held. In another case, the telephone company that serves New York found out that some of its buyers were giving contracts to suppliers who offered them vacation trips and other personal favors. Abuses of this sort have prompted many organizations to set up policies that prohibit a buyer or other employees from accepting anything from a potential supplier.

Marketers need to take concerns about conflict of interest very seriously. Part of the promotion job is to persuade different individuals who may influence an organization's purchase. Yet the whole marketing effort may be tainted if it even *appears* that a marketer has encouraged a person who influences a decision to put personal gain ahead of company interest.[6]

Purchasing may be centralized

If a large organization has facilities at many locations, much of the purchasing work may be done at a central location. With centralized buying, a sales rep may be able to sell to facilities all over a country—or even across several countries—without leaving a base city. Wal-Mart handles most of the purchase decisions for stores in its retail chain from its headquarters in Arkansas. Many purchasing decisions for agencies of the U.S. government are handled in Washington, D.C.

Many firms also have centralized controls on who can make purchases. A person who needs to purchase something usually completes a **requisition**—a request to buy something. This is frequently handled online to cut time and paper shuffling. Even so, there may be delays before a supervisor authorizes the requisition and a purchasing manager can select the "best" seller and turn the authorization into a purchase order. The process may take a few hours for a simple purchase—but it may turn into months for a complex purchase.

Organizational Buyers Are Problem Solvers

Three kinds of buying processes are useful

In Chapter 6, we discussed problem solving by consumers and how it might vary from extensive problem solving to routine buying. In organizational markets, we can adapt these concepts slightly and work with three similar buying processes: a new-task buying process, a modified rebuy process, or a straight rebuy.[7] See Exhibit 7-4.

Exhibit 7-4
Organizational Buying Processes

Characteristics	Type of Process		
	New-Task Buying	Modified Rebuy	Straight Rebuy
Time Required	Much	Medium	Little
Multiple Influence	Much	Some	Little
Review of Suppliers	Much	Some	None
Information Needed	Much	Some	Little

New-task buying occurs when an organization has a new need and the customer wants a great deal of information. New-task buying can involve setting product specifications, evaluating sources of supply, and establishing an order routine that can be followed in the future if results are satisfactory. Multiple buying influence is typical in new-task buying.

A **straight rebuy** is a routine repurchase that may have been made many times before. Buyers probably don't bother looking for new information or new sources of supply. Most of a company's small or recurring purchases are of this type—but they take only a small part of an organized buyer's time. Important purchases may be made this way too—but only after the firm has decided what procedure will be "routine."

The **modified rebuy** is the in-between process where some review of the buying situation is done—though not as much as in new-task buying. Sometimes a competitor will get lazy enjoying a straight rebuy situation. An alert marketer can turn these situations into opportunities by providing more information or a better marketing mix.

New-task buying requires information

Customers in a new-task buying situation are likely to seek information from a variety of sources. See Exhibit 7-5. Keep in mind that many of the impersonal sources are readily available in electronic form online as well as in other formats. How much information a customer collects depends on the importance of the purchase and the level of uncertainty about what choice might be best. The time and expense of searching for information may not be justified for a minor purchase. But a major purchase often involves real detective work by the buyer.

Of course, the flip side of the new-task buying situation is that a seller's promotion has much more chance to have an impact. At the very least, the marketer needs to be certain that his or her firm will turn up in the buyer's search. In this regard, a good website is a crucial piece of insurance. Later we will talk more about the role of e-commerce at this stage, but for now you should see that even a simple website is likely to turn up in a buyer's Internet search.[8]

Exhibit 7-5
Major Sources of Information Used by Organizational Buyers

	Marketing sources	Nonmarketing sources
Personal sources	• Salespeople • Others from supplier firms • Trade shows	• Buying center members • Outside business associates • Consultants and outside experts
Impersonal sources	• Advertising in trade publications • Sales literature • Sales catalogs • Web page	• Rating services • Trade associations • News publications • Product directories • Internet news pointcasts

What buying procedure becomes routine is critical

Once a buying firm gets beyond the early stages of a new-task buying decision, it needs to make important decisions about how it is going to deal with one or more suppliers to meet its needs. At one extreme, a buyer might want to rely on competition among all available vendors to get the best price on each and every order it places. At the other extreme, it might just routinely buy from one vendor with whom it already has a good relationship. In practice, there are many important and common variations between these extremes. To better understand the variations—and why firms rely on different approaches in different situations—let's take a closer look at the benefits and limitations of different types of buyer–seller relationships. That will also help you to see why new e-commerce developments in business markets have become so important.

Buyer–Seller Relationships in Business Markets

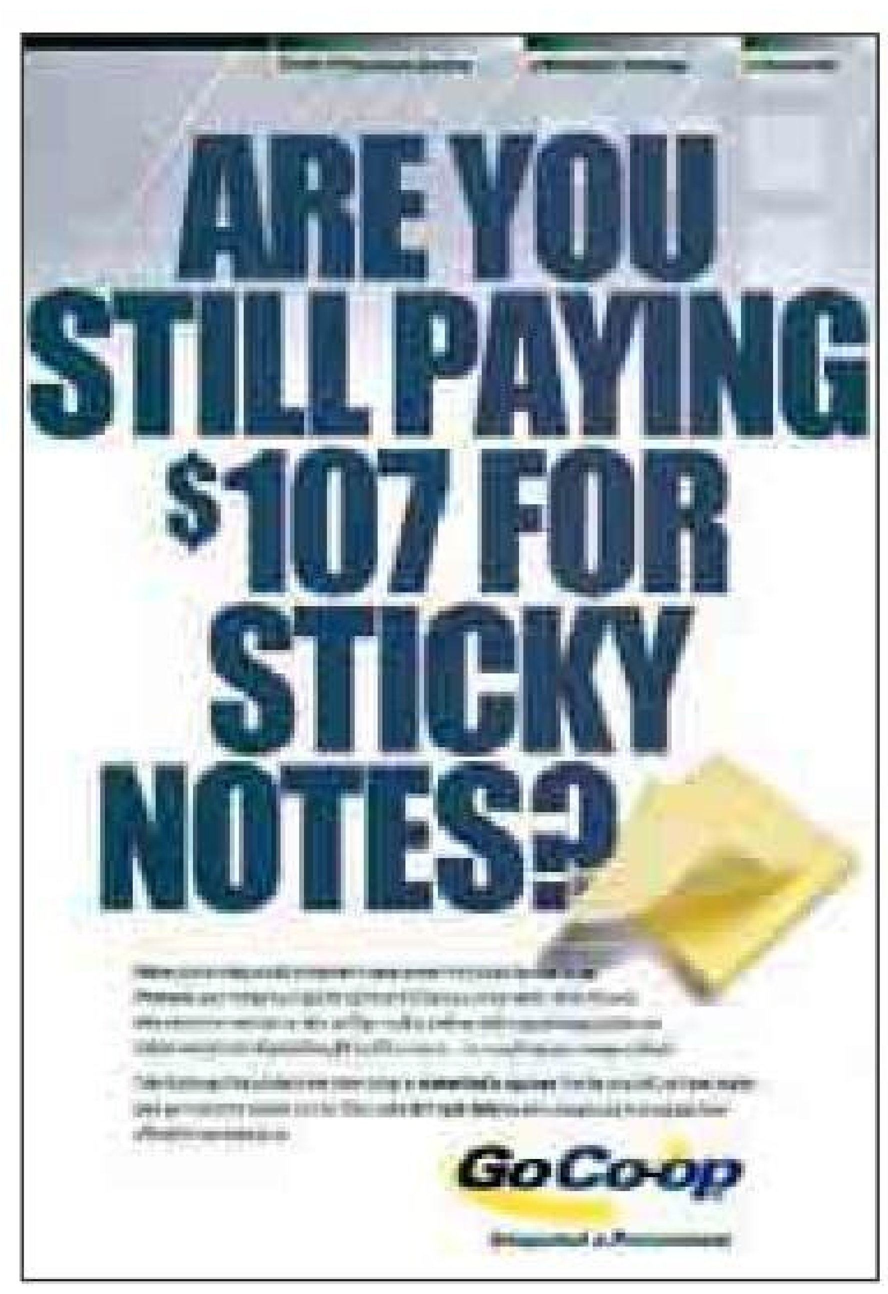
Close relationships may produce mutual benefits

There are often significant benefits of a close working relationship between a supplier and a customer firm. And such relationships are becoming common. Many firms are reducing the number of suppliers with whom they work—expecting more in return from the suppliers that remain. The best relationships involve real partnerships where there's mutual trust and a long-term outlook.

Closely tied firms can often share tasks at lower total cost than would be possible working at arm's length. Costs are sometimes reduced simply by reducing uncertainty and risk. A supplier is often able to reduce its selling price if a customer commits to larger orders or orders over a longer period of time. A large sales volume may produce economies of scale and reduce selling costs. The customer benefits from lower cost and also is assured a dependable source of supply.

A firm that works closely with a supplier can resolve joint problems. For example, it may cost both the supplier and the customer more to resolve the problems of a defective product after it is delivered than it would have cost to prevent the problem. But without the customer's help it may be impossible for the supplier to identify a solution to the problem. As the head of purchasing at Motorola puts it, "Every time we make an error it takes people at both ends to correct it."

In business-to-business markets, the Internet has prompted explosive growth in e-commerce and new central market "portals" that bring buyers and sellers together more quickly and at lower cost.



In today's business markets, suppliers of both goods and services are working to build closer relationships with their business customers—to meet needs better and create a competitive advantage.

The partnership between AlliedSignal and Betz Laboratories shows the benefits of a good relationship. A while back, Betz was just one of several suppliers that sold Allied chemicals to keep the water in its plants from gunking up pipes and rusting machinery. But Betz didn't stop at selling commodity powders. Teams of Betz experts and engineers from Allied studied each plant to find places where water was being wasted. In less than a year a team in one plant found $2.5 million in potential cost reductions. For example, by adding a few valves to recycle the water in a cooling tower, Betz was able to save 300 gallons of water a minute, which resulted in savings of over $100,000 a year and reduced environmental impact. Because of ideas like this, Allied's overall use of water treatment chemicals decreased. However, Betz sales to Allied doubled because it became Allied's sole supplier.[9]

Relationships may not make sense

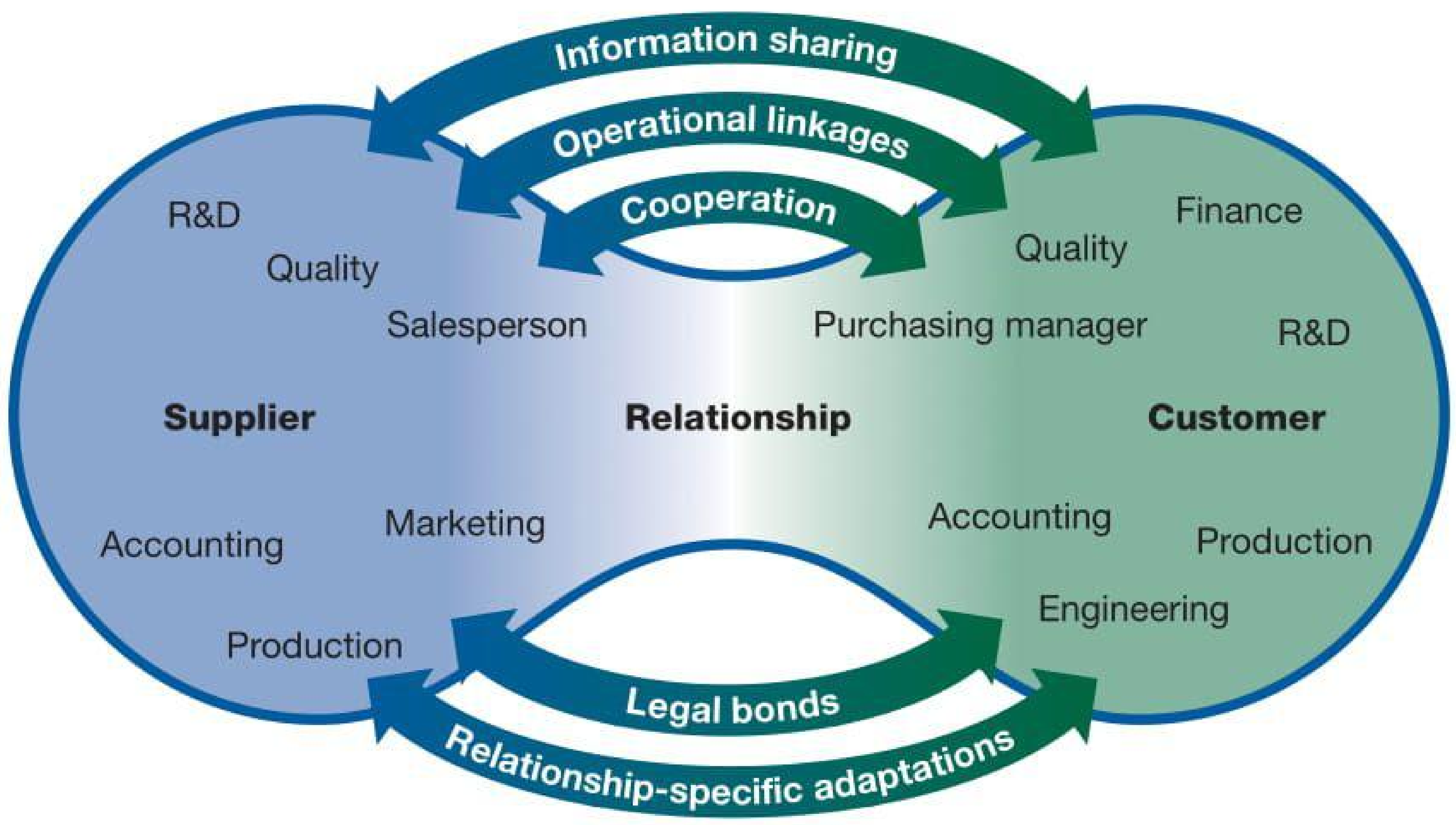
Although close relationships can produce benefits, they are not always best. A long-term commitment to a partner may reduce flexibility. When competition drives down prices and spurs innovation, the customer may be better off letting suppliers compete for the business. It may not be worth the customer's investment to build a relationship for purchases that are not particularly important or made that frequently.

It may at first appear that a seller would *always* prefer to have a closer relationship with a customer, but that is not so. Some customers may place orders that are too small or require so much special attention that the relationship would never be profitable for the seller. Also, in situations where a customer doesn't want a relationship, trying to build one may cost more than it's worth. Further, many small suppliers have made the mistake of relying too heavily on relationships with too few customers. One failed relationship may bankrupt the business.[10]

Relationships have many dimensions

Relationships are not "all or nothing" arrangements. Firms may have a close relationship in some ways and not in others. Thus, it's useful to know about five key dimensions that help characterize most buyer–seller relationships: cooperation, information sharing, operational linkages, legal bonds, and relationship-specific adaptations. Purchasing managers for the buying firm and salespeople for the supplier

Exhibit 7-6
Key Dimensions of Relationships in Business Markets



usually coordinate the different dimensions of a relationship. However, as shown in Exhibit 7-6, close relationships often involve direct contacts between a number of people from other areas in both firms.[11]

Cooperation treats problems as joint responsibilities

In cooperative relationships, the buyer and seller work together to achieve both mutual and individual objectives. This doesn't mean that the buyer (or seller) will always do what the other wants. Rather, the two firms treat problems that arise as a joint responsibility.

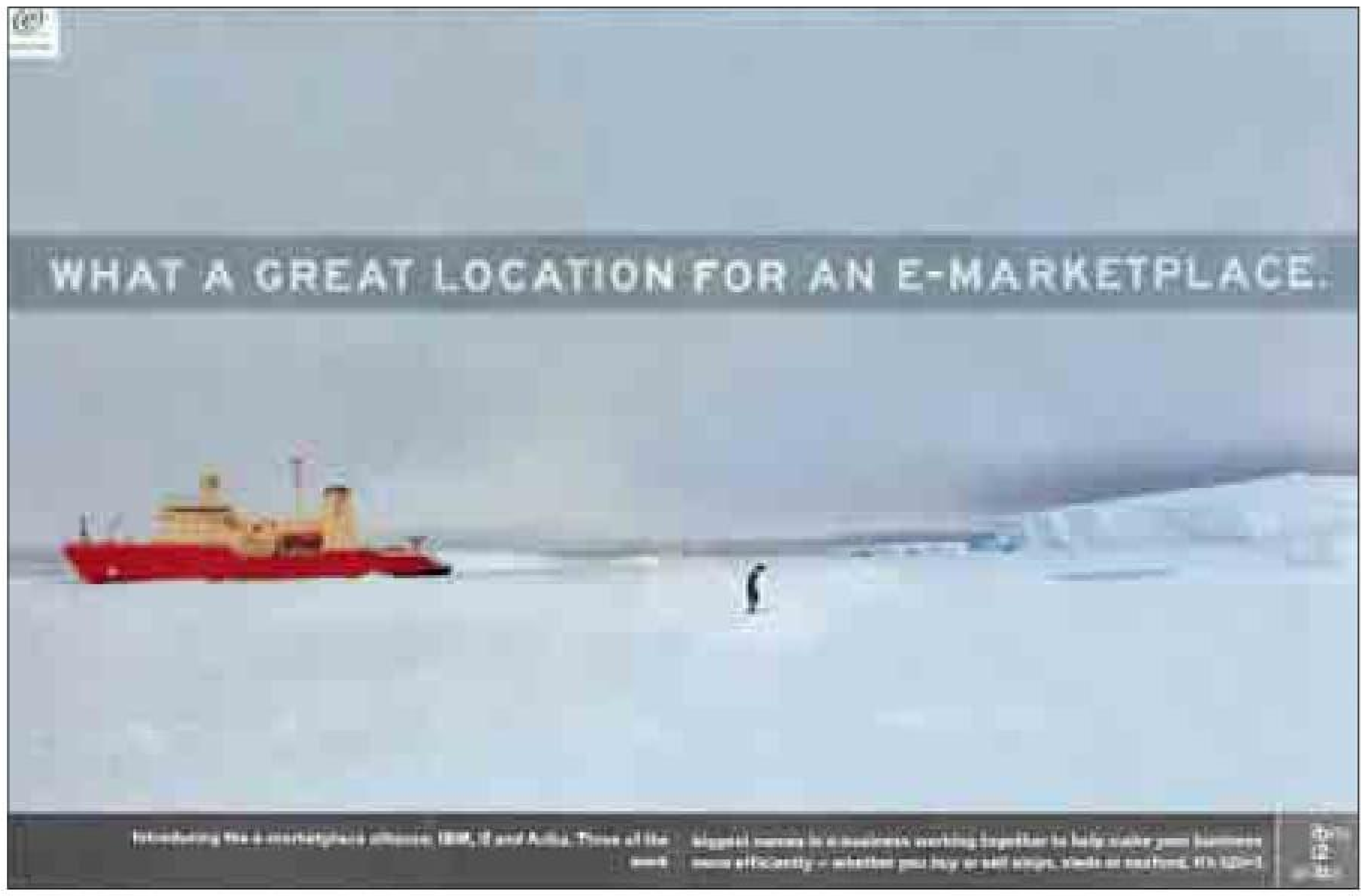
National Semiconductor (NS) and Siltec, a supplier of silicon wafers, have found clever ways to cooperate and cut costs. For example, workers at the NS plant used to throw away the expensive plastic cassettes that Siltec uses to ship the silicon wafers. Now Siltec and NS cooperate to recycle the cassettes. This helps the environment and also saves more than $300,000 a year. Siltec passes along most of that to NS as lower prices.[12]

Shared information is useful but may be risky

Some relationships involve open sharing of information that is useful to both the buyer and seller. This might include the exchange of proprietary cost data, discussion of demand forecasts, and joint work on new product designs. Information might be shared through information systems or over the Internet. This is often a key facet of relationships that involve e-commerce.

Many firms share information by providing relationship partners with access to password-protected websites. One big advantage of this approach is that it is fast and easy to update the information. A customer can trust information that is the same information used by someone inside the company. In addition, it provides easy "click-here" self-service access for customers who might have very different computer systems in their own firms. It also saves time. A customer can check detailed product specs or the status of a job on the production line without having to wait for a sales rep or someone else to answer the question.

Information sharing can lead to better decisions, reduced uncertainty about the future, and better planning. However, firms don't want to share information if there's a risk that a partner might misuse it. For example, some suppliers claim that General Motors' former purchasing chief showed blueprints of their secret technology to competing suppliers. Such violations of trust in a relationship are an ethical matter and should be taken seriously. However, as a practical matter, it makes sense to know a partner well before revealing all.



IBM, I2, and Ariba have formed an alliance to work together cooperatively and develop closer relationships with business customers, no matter what the customer's e-commerce purchasing needs may be.

Operational linkages share functions between firms

Operational linkages are direct ties between the internal operations of the buyer and seller firms. These linkages usually involve formal arrangements and ongoing coordination of activities between the firms. Shared activities are especially important when neither firm, working on its own, can perform a function as well as the two firms can working together. John Deere's relationship with MetoKote, described at the start of this chapter, involves operational linkages.

Operational linkages are often required to reduce total inventory costs. Business customers want to maintain an adequate inventory—certainly enough to prevent stock-outs or keep production lines moving. On the other hand, keeping too much inventory is expensive. Providing a customer with inventory when it's needed may require that a supplier be able to provide **just-in-time delivery**—reliably getting products there *just* before the customer needs them. We'll discuss just-in-time systems in more detail in Chapter 12. For now, it's enough to see that just-in-time relationships between buyers and sellers usually require operational linkages (as well as information sharing). For example, Wal-Mart might want a producer of socks to pack cartons so that when they are unloaded at a Wal-Mart distribution facility all of the cartons for a certain store or district are grouped together. This makes it easier and faster for forklifts to "cross dock" the pallets and load them onto an outbound truck. This also reduces Wal-Mart's costs because the cartons only need to be handled one time. However, it means that the supplier's production and packing of socks in different colors and sizes must be closely linked to the precise store in the Wal-Mart chain that places each order.

Operational linkages may also involve the routine activities of individuals who almost become part of the customer's operations. Design engineers, salespeople, and service representatives may participate in developing solutions to ongoing problems, conduct regular maintenance checks on equipment, or monitor inventory and coordinate orders. At the DaimlerChrysler design center, for example, 30 offices are set aside for full-time use by people employed by suppliers.

Linkages may be customized to a particular relationship, or they may be standardized and operate the same way across many exchange partners. For example, in the channel of distribution for grocery products many different producers are standardizing their distribution procedures and coordinating with retail chains to make it faster and cheaper to replenish grocery store shelves.

When a customer's operations are dependent on those of a supplier, it may be difficult or expensive to switch to another supplier. So buyers sometimes avoid a relationship that would result in these "switching costs."

Contracts spell out obligations

Many purchases in business markets are simple transactions. The seller's basic responsibility is to transfer title to goods or perform services, and the buyer's basic responsibility is to pay the agreed price. However, in some buyer–seller relationships the responsibilities of the parties are spelled out in a detailed legal contract. An agreement may apply only for a short period, but long-term contracts are also common.

For example, a customer might ask a supplier to guarantee a 6 percent price reduction for a particular part for each of the next three years and pledge to virtually eliminate defects. In return, the customer might offer to double its orders and help the supplier boost productivity. This might sound attractive to the supplier but also require new people or facilities. The supplier may not be willing to make these long-term commitments unless the buyer is willing to sign a contract for promised purchases. The contract might spell out what would happen if deliveries are late or if quality is below specification.

Sometimes the buyer and seller know roughly what is needed but can't fix all the details in advance. For example, specifications or total requirements may change over time. Then the relationship may involve **negotiated contract buying,** which means agreeing to a contract that allows for changes in the purchase arrangements. In such cases, the general project and basic price is described but with provision for changes and price adjustments up or down. Or a supplier may be asked to accept a contract that provides some type of incentive—such as full coverage of costs plus a fixed fee or full costs plus a profit percentage tied to costs.

When a contract provides a formal plan for the future of a relationship, some types of risk are reduced. But a firm may not want to be legally locked in when the future is unclear. Alternatively, some managers figure that even a detailed contract isn't a good substitute for regular, good-faith reviews to make sure that neither party gets hurt by changing business conditions.

Harley-Davidson used this approach when it moved toward closer relationships with a smaller number of suppliers. Purchasing executives tossed out detailed contracts and replaced them with a short statement of principles to guide relationships between Harley and its suppliers. This "operate on a handshake" approach is typical of relationships with Japanese firms. Many other firms have adopted it. It's great when it works, and a disaster when it doesn't.

Specific adaptations invest in the relationship

Relationship-specific adaptations involve changes in a firm's product or procedures that are unique to the needs or capabilities of a relationship partner. Industrial suppliers often custom design a new product for just one customer; this may require investments in R&D or new manufacturing technologies. Donnelly Corp. is an extreme example. It had been supplying Honda with mirrors for the interiors of its cars. Honda's purchasing people liked Donnelly's collaborative style, so they urged Donnelly to supply exterior mirrors as well. Donnelly had never been in that business—so it had to build a factory to get started.

Buying firms may also adapt to a particular supplier; a computer maker may design around Intel's Pentium chip, and independent photo processors say "We use Kodak paper for the good look" in their advertising. However, buyers are often hesitant about making big investments that increase dependence on a specific supplier. Typically, they do it only when there isn't a good alternative—perhaps because only one or a few suppliers are available to meet a need—or if the benefits of the investment are clear before it's made. On the other hand, sometimes a buyer will invest in a relationship because the seller has already demonstrated a willingness to do so.[13]

The relationship between Flex-N-Gate and Toyota illustrates relationship-specific adaptations. Flex-N-Gate had a contract to supply some of the rear bumpers Toyota needed for its U.S. facilities. After a while, however, Toyota's quality control people were unhappy about the number of minor defects in the bumpers. Further, Flex-N-Gate's deliveries were not as dependable as Toyota's production people required. Rather than just end the relationship, Toyota and Flex-N-Gate both made investments to improve it. Toyota sent a team of experts who spent a lot of time figuring out the reasons for the problems and then showing Flex-N-Gate how to build better bumpers faster and cheaper. Following the advice of Toyota's experts, Shahid Khan (Flex-N-Gate's owner) reorganized equipment in his factory. He also had to retrain his employees to do their jobs in new ways. The changes were so complicated that two of Khan's six production supervisors quit in frustration. But the trouble was worth the effort. Productivity went up 60 percent, the number of defects dropped by 80 percent, and Flex-N-Gate got a larger share of Toyota's business. Toyota got something it wanted, too: a committed supplier that could meet its standards and a big price reduction on bumpers.[14]

A seller may have more incentive to propose new ideas that save the customer money when the firms have a mutual investment in a long-term relationship. The customer firm usually rewards the seller with more orders or a larger share of its business, and this encourages future suggestions and loyalty by the supplier. In contrast, buyers who use a competitive bid system exclusively—either by choice or necessity, as in some government and institutional purchasing—may not be offered much beyond basic goods and services. They are interested primarily in price.

Powerful customer may control the relationship

Although a marketing manager may want to work in a cooperative partnership, that may be impossible with large customers who have the power to dictate how the relationship will work. For example, Duall/Wind, a plastics producer, was a supplier of small parts for Polaroid instant cameras. But when Duall/Wind wanted to raise its prices to cover increasing costs, Polaroid balked. Polaroid's purchasing manager demanded that Duall/Wind show a breakdown of all its costs, from materials to labor to profit. As Duall/Wind's president said, "I had a tough time getting through my head that Polaroid wanted to come right in here and have us divulge all that." But Polaroid is a big account—and it got the information it wanted. Polaroid buyers agreed to a price increase only after they were confident that Duall/Wind was doing everything possible to control costs.[15]

Buyers may still use several sources to spread their risk

Even if a marketing manager develops the best marketing mix possible and cultivates a close relationship with the customer, the customer may not give *all* of its business to one supplier. Buyers often look for several dependable sources of supply to protect themselves from unpredictable events such as strikes, fires, or floods in one of their suppliers' plants. A good marketing mix is still likely to win a larger share of the total business—which can prove to be very important. From a buyer's point of view, it may not seem like a big deal to give a particular supplier a 30 percent share of the orders rather than a 20 percent share. But for the seller that's a 50 percent increase in sales![16]

Reciprocity may influence relationship

We've emphasized that most buyer–seller relationships are based on reducing the customer's total procurement costs. However, for completeness we should mention that some relationships are based on reciprocity. **Reciprocity** means trading sales for sales—that is, "if you buy from me, I'll buy from you." If a company's customers also can supply products that the firm buys, then the sales departments of both buyer and seller may try to trade sales for sales. Purchasing managers generally resist reciprocity but often face pressure from their sales departments.

When prices and quality are otherwise competitive, an outside supplier seldom can break a reciprocity relationship. The supplier can only hope to become an alternate source of supply and wait for the competitor to let its quality slip or prices rise.

Reciprocity is often a bigger factor in other countries than it is in the United States. In Japan, for example, reciprocity is very common.[17]

We've been discussing some of the differences in how customer firms and their suppliers relate to each other. How a customer uses e-commerce is also related to these differences.

Internet E-Commerce Is Reshaping Many Business Markets

The Internet and new types of B2B e-commerce websites have quickly and dramatically changed the way in which many purchase decisions are made and how a firm relates to its suppliers. In general, the Web is making it possible for all types of information to flow back and forth between buyers and sellers much more quickly and efficiently. This lowers the cost of the search for market information and, in many cases, the cost of transactions. For example, online order systems can cut out paper-shuffling bottlenecks, speed the delivery of purchases, and reduce inventory costs. We'll discuss distribution service related issues in more detail in Chapter 12.

Here, we'll consider basic e-commerce website resources that many buyers use and the role that they play. We'll consider them separately, but often one website (or linked set of websites) combines them.

Community sites mainly offer digital information

Like online trade magazines (or online trade associations), community sites offer information and communications of interest for specific industries. A website may focus on a single "community" or feature different sections for many different industries. For example, www.verticalnet.com has many separate communities for different industries, ranging from food processing and solid-waste management to health care and utilities. Community sites were among the first on the Web because many just put in digital form information that was already being distributed in other ways. Initially they relied on advertising revenue to operate, but now some of them are trying to earn commissions based on sales referrals.

Catalog sites make it convenient to search for products

Catalog sites, as the name implies, offer digital product catalogs, usually for a number of different sellers. For example, PlasticsNet.com focuses on polymers and resins used in the plastic industry. The basic benefit of catalog sites is that they make it easy for industrial buyers to search for a product and do one-stop shopping. For example, Grainger's OrderZone.com features a vast array of supply items that are used across many different industries. Some catalog sites are trying to upgrade their software and service to make it easier for a buyer to place an order, track delivery status, and update inventory information. Others are trying to improve the quality of the information available. For example, rather than just give a basic description of an electric motor a site might also provide a link so the buyer can download detailed engineering drawings and electrical details.

Exchanges bring buyers and sellers together

Exchanges operate much like a stock exchange (for example, the New York Stock Exchange) by bringing buyers and sellers together, usually anonymously, to agree on prices for commodities such as energy (see, for example, www.altranet.com) or telecommunications capacity. Exchanges are sometimes independent intermediaries or they may be backed by major firms in the industry. Either way, an exchange must maintain a neutral role and not favor either buyers or sellers if it expects return visits.

Procurement hubs operate for the benefit of buyers

Procurement hub sites direct suppliers to particular companies (or industries) in one place. Some large companies have created procurement hubs to handle purchasing for all of their own divisions. In some industries, recognized leaders have banded together to create procurement hubs. The big three automakers in the U.S. are doing this. These hubs are becoming an important, buyer-driven force in e-commerce. They make it easier for a larger number of suppliers to find out about the purchasing needs of customers in target industries. As a result, the number of suppliers competing for a buyer's business increases, and this tends to drive down selling prices or provide benefits to the buyer with respect to other terms of the sale. On the other hand, procurement hubs are a way for a seller to find out about and pursue sales opportunities with new customers (or new markets) without a lot of additional selling expense.

Interactive competitive bidding systems drive down prices

Most procurement hubs incorporate some sort of interactive system to get competitive bids. **Competitive bids** are the terms of sale offered by different suppliers in response to the purchase specifications posted by the buyer. Usually, the focus is on the supplier's price. Firms have used the competitive bidding process for a long time. However, before the Internet it was usually too slow and too inconvenient to go through several rounds of bids. Now, however, the Internet makes it fast and easy for the customer firm to run what is sometimes called a *reverse auction*. Vendors are invited (via e-mail or at the procurement hub) to place a bid for a purchase with a given specification. Usually the bidding still focuses on price, but sometimes other terms of sales (like warranty period or delivery time) are considered as well. Each bid, and who made it, is typically visible to all potential bidders via the website. That way, other bidders can decide whether or not to offer the customer a lower price. Depending on the preferences of the customer, the bidding can be limited by a specific deadline.

Auction sites focus on unique items

Auction sites tend to be more seller-driven and are especially popular for items such as used equipment and vehicles, surplus inventory, and perishable products (such as unsold advertising space or produce) that are unique and only available for sale once. For example, www.avbid.new runs auctions related to aircraft parts and services. At these auctions the seller lists and describes what's for sale, and potential buyers place their bids (what they would pay) at a website. Auctions use a variety of formats, but in general the highest bidder (prior to the deadline) purchases the product. Some auction sites also handle reverse auctions for the benefit of buyers.

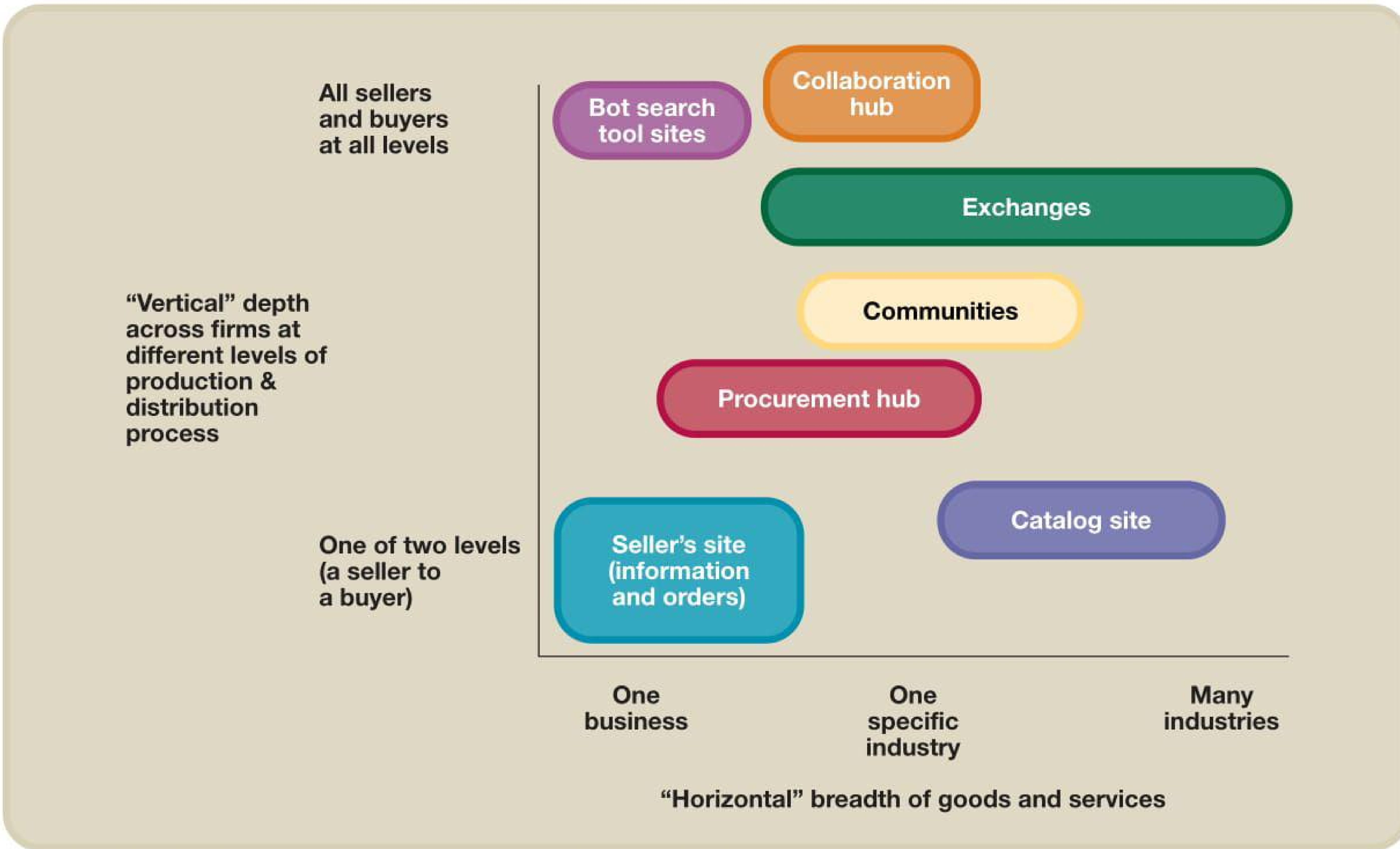
Collaboration hubs support cooperation

Collaboration hubs go beyond matching buyers and sellers for a one-time transaction and instead are designed to help firms work together. The collaboration might involve design, manufacturing, and distribution. Many of these sites focus on the needs of smaller firms, usually within a vertical industry. For instance, Citadon (www.citadon.com) provides a single online workplace for construction contractors to collaborate with architects, store blueprints, work through building permit requirements, and purchase building materials.

Websites within and across industries

As the examples above suggest, some B2B e-commerce websites are specialized for firms at different levels of production and distribution within a particular industry. For example, one of these "vertical" sites that specializes on the plastics industry might be of interest to firms that make the basic chemicals from which plastics are formed, firms that create plastic injection molding equipment, and

Exhibit 7-7 Examples of Different B2B E-Commerce Sites Used by Organizational Buyers and Sellers



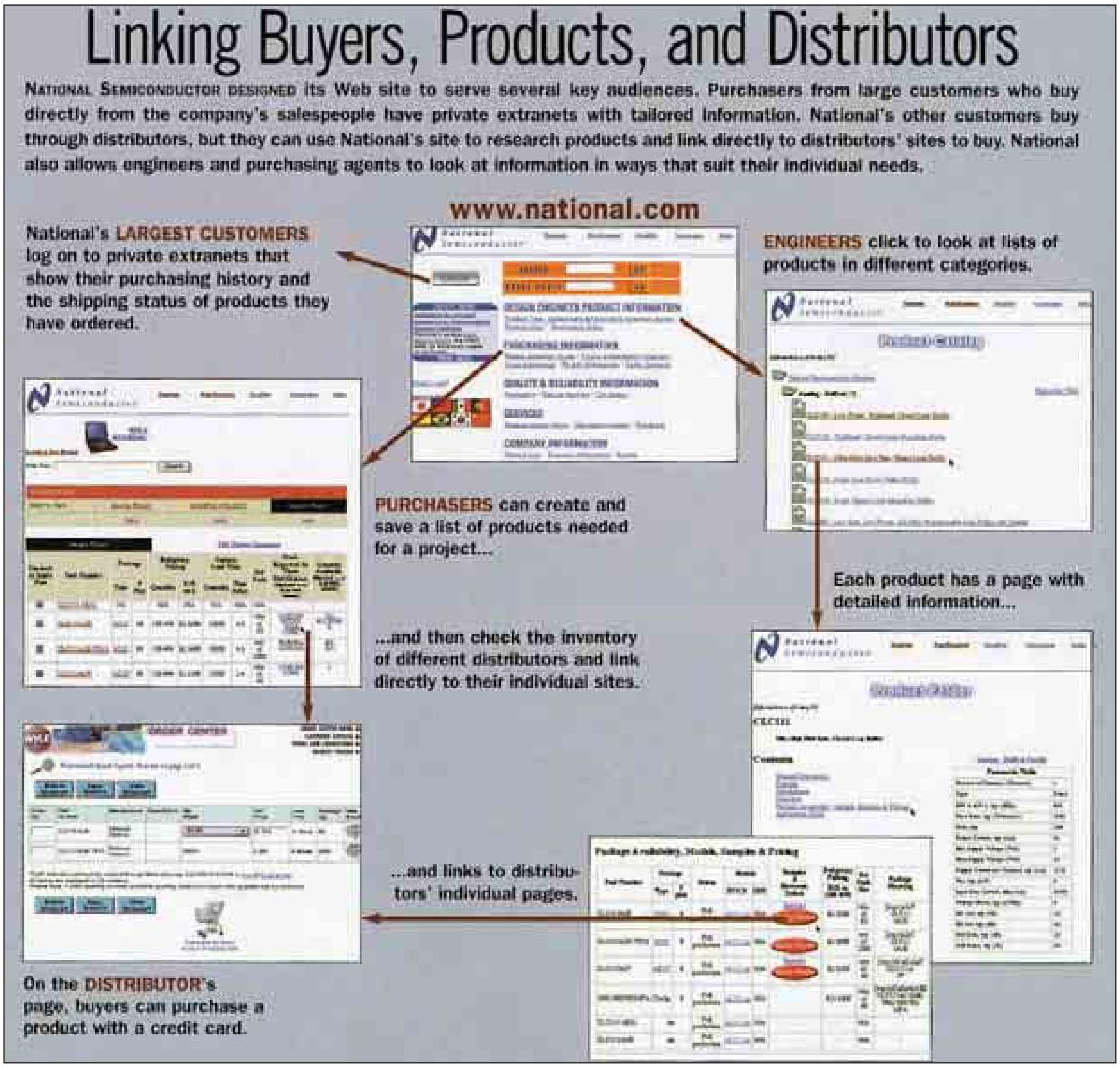
firms that use that equipment to make finished goods. On the other hand, some websites are designed to serve a broad ("horizontal") cross section of firms from different industries. For example, a horizontal site might serve manufacturers regardless of whether they produce bearings, truck frames, or construction equipment. See Exhibit 7-7.

One consequence of these differences in focus is that there are many sites with potentially overlapping coverage. While some industries are not covered well, in other industries many sites compete to be *the* central market. As a result, this is an arena in which there are still many ongoing changes. Hundreds, or perhaps thousands, of B2B websites that were established just a few years ago have already disappeared, and consolidation is still underway. In some industries there are so many sites that instead of simplifying the buying and selling process they have made it unnecessarily complicated. For example, a seller who posts an auction on the wrong site may get few bids, or no bids, from firms who might be serious buyers. Those buyers, in turn, might waste time checking other sites not included in the sellers' efforts.

Internet (ro)bots search for products—by description

Because of such problems, purchasing managers often turn to special software packages to help with their search effort. For example, if a purchasing manager can specify a certain model of a product the search "bot" (short for *robot*) looks at all of the websites on the Internet to find everywhere that the product is mentioned. Some bots take things further and assemble price comparisons or e-mail distribution lists.

Bots are also helping purchasing people who have trouble figuring out exactly how to describe what they want. By searching for descriptions of products in a broad product category, it is often possible to develop a better understanding not only of what alternatives exist but also of what specs are best for the particular need.



Some purchasing managers are using this basic approach to locate hard-to-find, off-the-shelf products that eliminate the need for custom-produced items. For example, Allstates Rubber & Tools in the suburbs of Chicago is a small firm, but it's on the Internet. Allstates recently got a $1,000 order for rubber grommets (tiny rings used to protect electric wires) from a company in Saudi Arabia. If the customer had not been able to locate Allstates' website on the Internet it probably would have paid higher prices to have the grommets custom-produced—and Allstates would have missed the business.[18]

GE Lights the Way for E-Commerce

General Electric is a true pioneer in e-commerce—and its successes provide evidence of what is possible. Even so, some of its early efforts didn't work. When it first tried to solicit bids from vendors over the Internet, it only focused on price. So it got a lot of lowball quotes from firms that didn't have the ability to fill orders. By 1995 GE was on a smarter track. It developed an Internet-based system called the Trading Process Network (TPN) that eliminated the delays of traditional purchasing approaches still using paper documents and snail mail. With TPN, a buyer for GE's lighting division could search the Net to find possible suppliers for the custom-made machine tools it needed. To eliminate the paper shuffle, electronic blueprints could be sent with a bid request via e-mail. As a GE purchasing manager put it, they could "simply point and click and send out a bid package to suppliers around the world." Suppliers could respond quickly, too. So a bid process that previously took about a month could be reduced to only days, or even hours.

When GE executives saw how e-commerce was improving their purchasing, they decided to offer the TPN service to outside companies. A small firm could try the TPN Web (www.getradeweb.com) for a fee of only $65 a month. However, the monthly fee for a large company was $70,000. That pricing gives a hint of the kind of savings big purchasers could reap—and why GE's Global eXchange Services (GXS) division pushed to develop a full-service Internet portal (www.gegxs.com). GSX now operates one of the largest B2B e-commerce networks in the world. It has more than 100,000 trading partners. The network handles 1 billion transactions a year for goods and services worth $1 trillion.

GE has continued to drive down its own purchasing costs with e-commerce. In the first six months that it used real-time, online competitive bidding, GE saved $480 million. However, even GE does not purchase everything this way. Its current target is to do about 30 percent of purchases online. And even with online competitive bidding it does not always select the lowest bid. A supplier with a higher bid may get the business when it offers service or other value that GE needs.[19]

www.mhhe.com/fourps

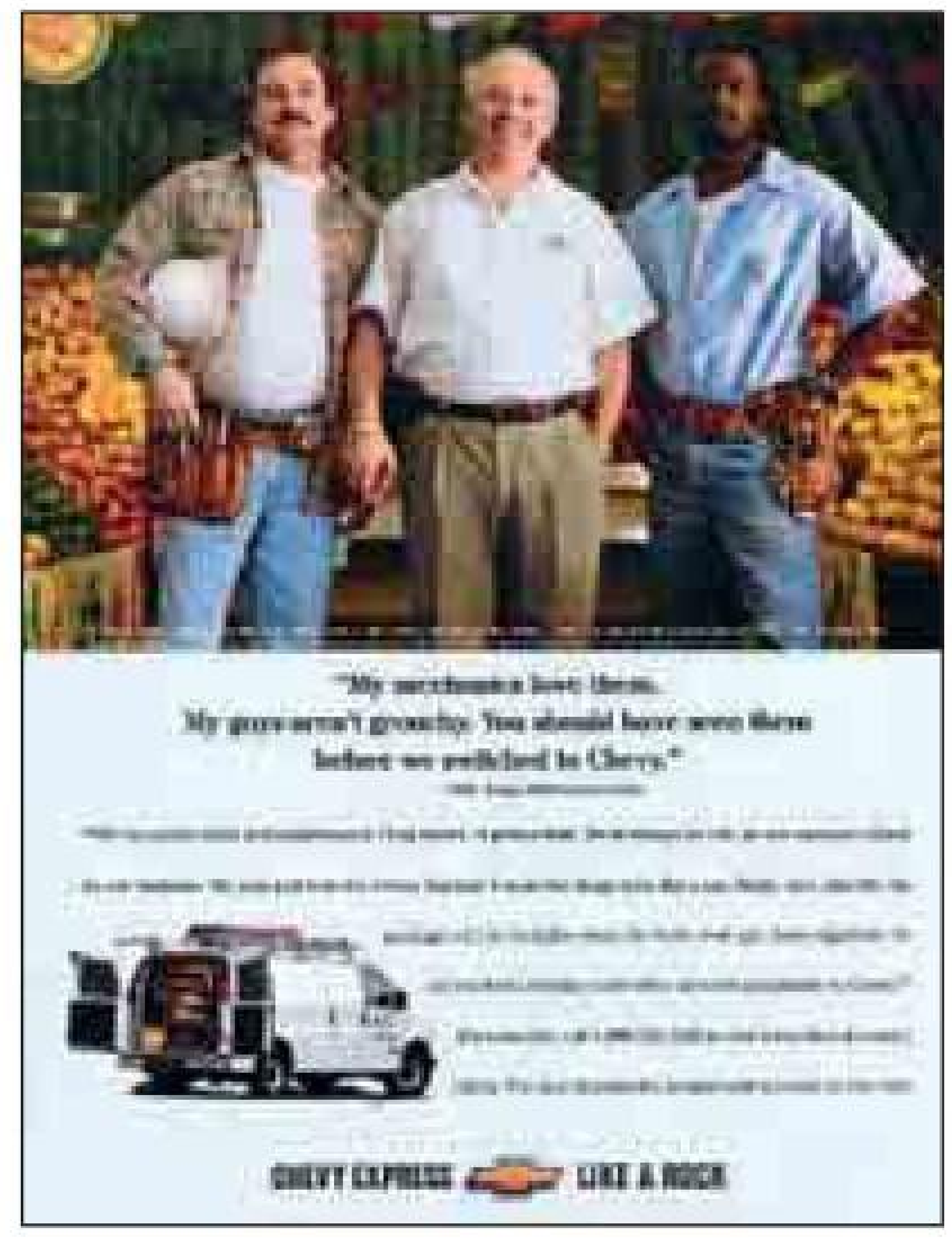
More progress is needed

You can see that there are many different B2B e-commerce sites that are helping sellers find interested buyers and vice versa. Until recently, much of the attention was on providing information to drive down the purchase price for specific transactions. Yet as we've said from the start, business customers are usually interested in the total cost of working with a supplier and the value of a supplier's marketing mix—not just in the product price. When everything else is the same, a buyer would obviously prefer low prices. But "everything else" is not always the same. We considered many examples of this earlier when we reviewed why a buyer might prefer closer relationships with fewer sellers. So it is important to see that Internet tools that focus primarily on lowering purchase prices do not necessarily lower total purchasing costs or apply to all types of purchases.

On the other hand, great strides are being made in developing websites and Internet-based software tools that help both buyers and sellers work together in more efficient and effective relationships. National Semiconductor's website is a good example. It is designed to create easy links between its customers, products, and distributors. Its large customers get special services, like access to a secure website that shows specific purchase histories and production or shipping status of their orders. Smaller customers can get all the product information they need and then link directly to the order page for the distributor that serves them. This system does not go as far as some, but it does illustrate how shared information and cooperation over the Internet is helping to create better relationships in business markets.[20]

E-commerce order systems are common

We've been discussing ways in which buyers and sellers use the Web. But e-commerce computer systems now *automatically* handle a large portion of routine order-placing. Buyers program decision rules that tell the computer how to order



Many firms, including Hertz and Chevrolet (a division of GM), are developing new strategies to target small businesses—a fast growing sector of the economy.

and leave the details of following through to the machine. For example, when an order comes in that requires certain materials or parts, the computer system automatically orders them from the appropriate suppliers, the delivery date is set, and production is scheduled.

When economic conditions change, buyers modify the computer instructions. When nothing unusual happens, however, the computer system continues to routinely rebuy as needs develop—electronically sending purchase orders to the regular supplier.

Obviously, it's a big sale to be selected as the major supplier that routinely receives all of a customer's electronic orders for the products you sell. Often this type of customer will be more impressed by an attractive marketing mix for a whole *line* of products than just a lower price for a particular order. Further, it may be too expensive and too much trouble to change the whole buying system just because somebody is offering a low price on a particular day.

It pays to have an ongoing relationship

In this sort of routine order situation, it's very important to be one of the regular sources of supply. For straight rebuys, the buyer (or computer) may place an order without even considering other potential sources. However, if a buyer believes that there are several suppliers who could meet the specs, the buyer may request competitive bids. If different suppliers' quality, dependability, and delivery schedules all meet the specs, the buyer will select the low-price bid. But a creative marketer needs to look carefully at the purchaser's specs—and the need—to see if other elements of the marketing mix could provide a competitive advantage.

Sellers' sales reps (and perhaps whole teams of people) regularly call on these customers, but *not* to sell a particular item. Rather, they want to maintain relations, become a preferred source, or point out new developments that might cause the buyer to reevaluate the present straight rebuy procedure and give more business to the sales rep's company.

Variations in buying by customer type

We've been discussing aspects of relationships and e-commerce that generally apply with different types of customer organizations—in both the U.S. and internationally. However, it's also useful to have more detail about specific types of customers.

Manufacturers Are Important Customers

There are not many big ones

One of the most striking facts about manufacturers is how few there are compared to final consumers. This is true in every country. In the United States, for example, there are about 366,000 factories. Exhibit 7-8 shows that the majority of these are quite small—over half have less than 10 workers. But these small firms account for less than 3 percent of manufacturing value. In small plants, the owners often do the buying. And they buy less formally than buyers in the relatively few large manufacturing plants—which employ most of the workers and produce a large share of the value added by manufacturing. For example, plants with 250 or more employees make up less than 4 percent of the total—yet they employ nearly half of the production employees and produce about 61 percent of the value added by manufacturers.

In other countries, the size distribution of manufacturers varies. But across different countries, the same general conclusion holds: It is often desirable to segment industrial markets on the basis of customer size because large firms do so much of the buying.

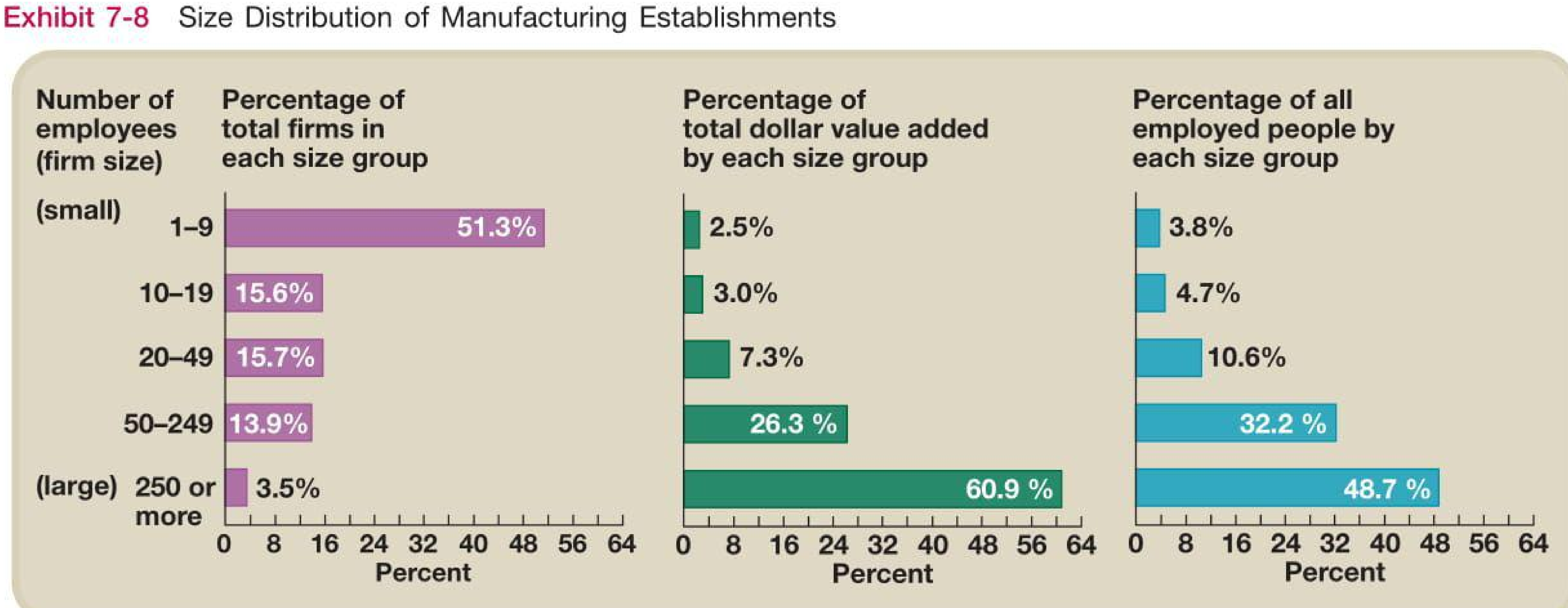
Customers cluster in geographic areas

In addition to concentration by company size, industrial markets are concentrated in certain geographic areas. Internationally, industrial customers are concentrated in countries that are at the more advanced stages of economic development. From all the talk in the news about the U.S. shifting from an industrial economy to a service economy or an information economy you might conclude that the U.S. is an exception—that the industrial market in this country is shrinking. But that's a myth. The U.S. is still the world's leading industrial economy. What's more, manufacturing output is higher than at any other time in the nation's history. So in a global sense, there is a high concentration of manufacturers in the U.S.

Within a country, there is often further concentration in specific areas. In the U.S., many factories are concentrated in big metropolitan areas—especially in New York, Pennsylvania, Ohio, Illinois, Texas, and California.[21]

There is also concentration by industry. In Germany, for example, the steel industry is concentrated in the Ruhr Valley. Similarly, U.S. manufacturers of high-tech electronics are concentrated in California's famous Silicon Valley near San Francisco and also along Boston's Route 128.

Exhibit 7-8 Size Distribution of Manufacturing Establishments



A firm like Alcoa Aluminum is likely to find that the majority of its customers are concentrated within a few industries that it can identify by Industry Classification System code number.

Business data often classifies industries

The products an industrial customer needs to buy depend on the business it is in. Because of this, sales of a product are often concentrated among customers in similar businesses. For example, apparel manufacturers are the main customers for buttons. Marketing managers who can relate their own sales to their customers' type of business can focus their efforts.

Detailed information is often available to help a marketing manager learn more about customers in different lines of business. The U.S. government collects and publishes data by the **North American Industry Classification System (NAICS) codes**—groups of firms in similar lines of business. (NAICS is pronounced like "nakes.") The number of establishments, sales volumes, and number of employees—broken down by geographic areas—are given for each NAICS code. A number of other countries collect similar data, and some of them try to coordinate their efforts with an international variation of the NAICS system. However, in many countries data on business customers is incomplete or inaccurate.

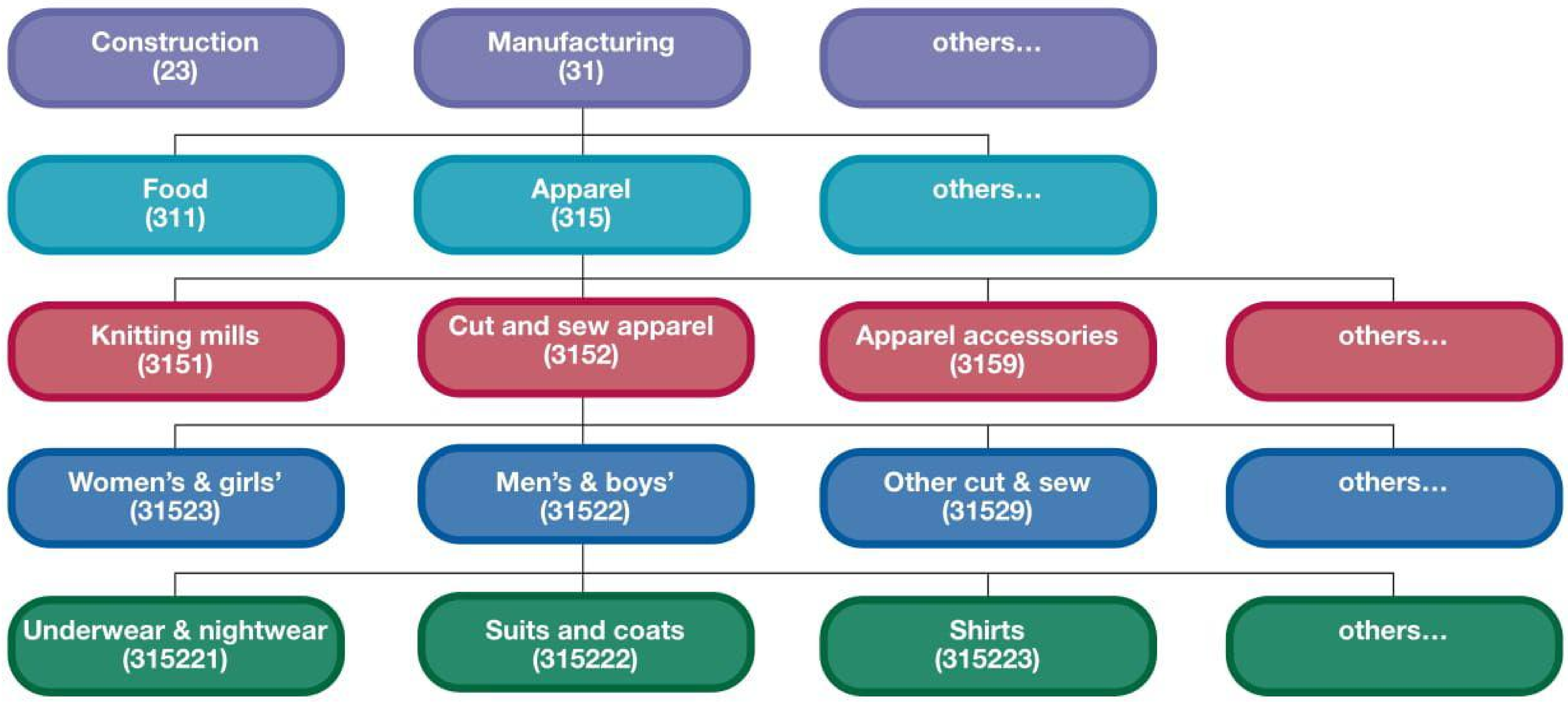
The NAICS is a recent development. The U.S. adopted it as a standard in 1997. However, it is being phased in over time. The phase-in makes it easier to use the system because in the past data were reported using Standard Industrial Classification (SIC) codes. Many of the codes are similar; check the website at www.naics.com for details. However, the move to the new system should help business marketers. The NAICS system is suited for identifying new or fast-changing industries—and for marketers that spells opportunity. NAICS is also more detailed than SIC and works better for services such as financial institutions, health care providers, and firms in the entertainment business. The general logic of NAICS and SIC is similar. So let's take a closer look at how the NAICS codes work.

The NAICS code breakdowns start with broad industry categories such as construction (23), manufacturing (31), wholesale trade (42), finance and insurance (52), and so on. Within each two-digit industry breakdown, much more detailed data may be available for three-digit industries (that is, subindustries of the

Internet

Internet Exercise Comprehensive information about NAICS codes is available online (www.naics.com). At the website select "Find Your NAICS Code" and when the search page appears submit a query for the keyword "welding." If your firm was interested in selling its lasers to manufacturers of laser welding equipment, what is the NAICS code of the industry for which you would want to get a list of manufacturers?

Exhibit 7-9 Illustrative NAICS Code Breakdown for Apparel Manufacturers



two-digit industries). For example, within the two-digit manufacturing industry (code 31) there are manufacturers of food (311), beverages and tobacco (312), and others, including apparel manufacturers (315). Then each three-digit group of firms is further subdivided into more detailed four-, five-, and six-digit classifications. For instance, within the three-digit (315) apparel manufacturers there are four-digit subgroups for knitting mills (3151), cut and sew firms (3152), and producers of apparel accessories (3159). Exhibit 7-9 illustrates that breakdowns are more detailed as you move to codes with more digits. However, detailed data (say, broken down at the four-digit level) isn't available for all industries in every geographic area. The government does not provide detail when only one or two plants are located in an area.

Many firms find their *current* customers' NAICS (or SIC) codes and then look at NAICS-coded lists for similar companies that may need the same goods and services. Other companies look at which NAICS categories are growing or declining to discover new opportunities.

If companies aiming at business target markets in the United States know exactly who they are aiming at, readily available data organized by NAICS (or SIC) codes can be valuable. Most trade associations and private organizations that gather data on business markets also use these codes.

The NAICS codes are an improvement over the old approach, but they are not perfect. Some companies have sales in several categories but are listed in only one—the code with the largest sales. In addition, some businesses don't fit any of the categories very well. So although a lot of good information is available, the codes must be used carefully.[22]

Producers of Services—Smaller and More Spread Out

Marketing managers need to keep in mind that the service side of the U.S. economy is large and has been growing fast. Service operations are also growing in some other countries. There may be good opportunities in providing these companies with the products they need to support their operations. But there are also challenges.

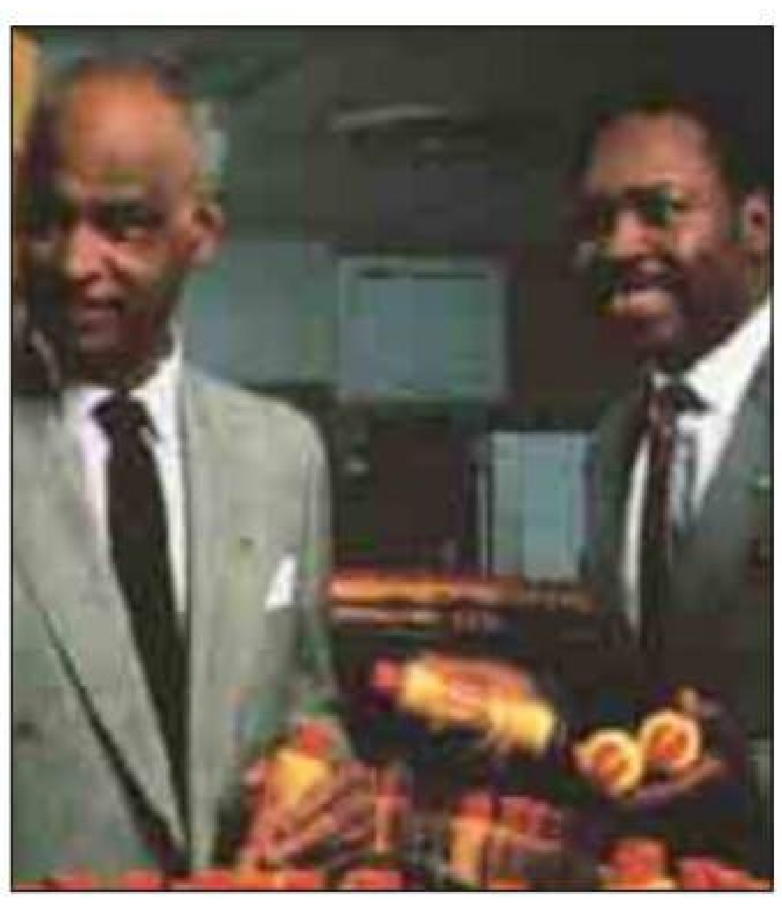
The United States has about 2.5 million service firms—over six times as many as it has manufacturers. Some of these are big companies with international operations. Examples include AT&T, Hilton Hotels, Prudential Insurance, CitiGroup, and EDS (Electronic Data Systems). These firms have purchasing departments that are like those in large manufacturing organizations. But as you might guess given the large number of service firms, most of them are small. They're also more spread out around the country than manufacturing concerns. Factories often locate where transportation facilities are good, raw materials are available, and it is less costly to produce goods in quantity. Service operations, in contrast, often have to be close to their customers.

Buying may not be as formal

Purchases by small service firms are often handled by whoever is in charge. This may be a doctor, lawyer, owner of a local insurance agency, or manager of a hotel. Suppliers who usually deal with purchasing specialists in large organizations may have trouble adjusting to this market. Personal selling is still an important part of promotion, but reaching these customers in the first place often requires more advertising. And small service firms may need much more help in buying than a large corporation.

Canon, the familiar name in office copiers, was very successful serving the needs of smaller service firms like law offices. Canon developed promotion materials to help first-time buyers understand differences in copiers. It emphasized that its machines were easy to use and maintain. And Canon also used retail channels to make the copiers available in smaller areas where there wasn't enough business to justify using a sales rep.[23]

Retailers and Wholesalers Buy for Their Customers

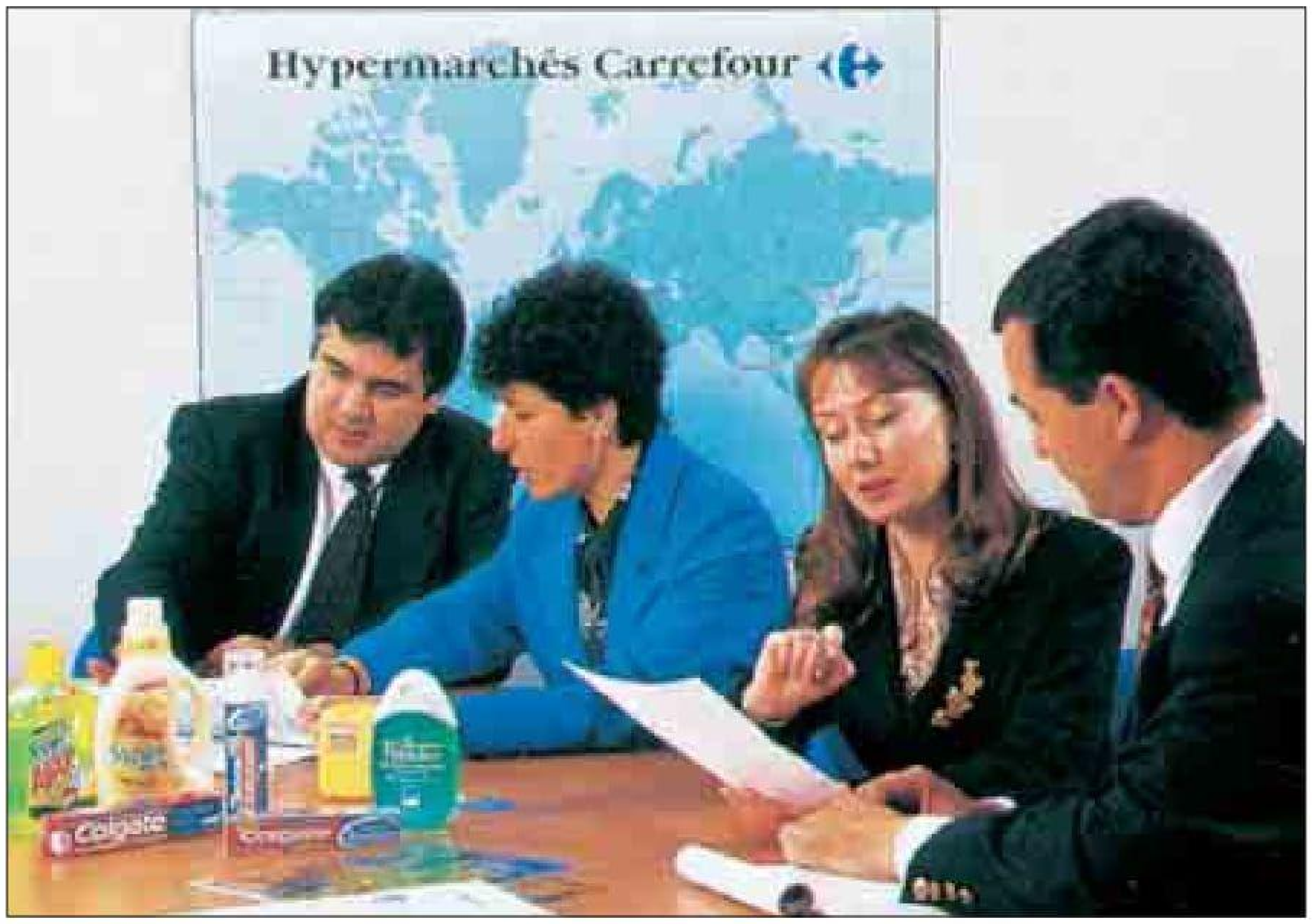


Most retail and wholesale buyers see themselves as purchasing agents for their target customers—remembering the old saying that "Goods well bought are half sold." Typically, retailers do *not* see themselves as sales agents for particular manufacturers. They buy what they think they can profitably sell. For example, the buying specialist at Walgreens Drugstores who handles products targeted at ethnic consumers is a real expert. He knows what ethnic customers want and won't be persuaded by a sales rep for a manufacturer who can't provide it. Of course, there is a place for collaboration, as when the Walgreens buyer works with people at Soft Sheen Products to develop a new product for the African American target market. That's profitable for both firms.

Similarly, wholesalers buy what they think their retailers can sell. In other words, they focus on the needs and attitudes of *their* target customers. For example, Super Valu—a leading food distributor in the U.S.—calls itself "the retail support company." As a top manager at Super Valu put it, "Our mandate is to try to satisfy our retailer customers with *whatever it takes*."[24]

Committee buying is impersonal

Some buyers—especially those who work for big retail chains—are annoyed by the number of wholesalers' and manufacturers' representatives who call on them. Space in their stores is limited and they simply are not interested in carrying every



Colgate and Carrefour executives in France work together to create mutually beneficial programs not only for the retailer's home country but for the many other countries where Carrefour is expanding.

product that some salesperson wants them to sell. Consider the problem facing grocery chains. In an average week, 150 to 250 new items are offered to the buying offices of a large chain like Safeway. If the chain accepted all of them, it would add 10,000 new items during a single year! Obviously, these firms need a way to deal with this overload.[25]

Decisions to add or drop lines or change buying policies may be handled by a *buying committee*. The seller still calls on and gives a pitch to a buyer—but the buyer does not have final responsibility. Instead, the buyer prepares forms summarizing proposals for new products and passes them on to the committee for evaluation. The seller may not get to present her story to the buying committee in person. This rational, almost cold-blooded approach certainly reduces the impact of a persuasive salesperson. On the other hand, it may favor a firm that has hard data on how its whole marketing mix will help the retailer to attract and keep customers.

Buyers watch computer output closely

Most larger firms now use sophisticated computerized inventory replenishment systems. Scanners at retail checkout counters keep track of what goes out the door—and computers use this data to update the records. Even small retailers and wholesalers use automated control systems that create daily reports showing sales of every product. Buyers with this kind of information know, in detail, the profitability of the different competing products. If a product isn't moving, the retailer isn't likely to be impressed by a salesperson's request for more in-store attention or added shelf space.

Reorders are straight rebuys

Retailers and wholesalers usually carry a large number of products. A drug wholesaler, for example, may carry up to 125,000 products. Because they deal with so many products, most middlemen buy their products on a routine, automatic reorder basis—straight rebuys—once they make the initial decision to stock specific items. Automatic computer ordering is a natural outgrowth of computerized checkout systems. Sellers to these markets must understand the size of the buyer's job and have something useful to say and do when they call.

Some are not "open to buy"

Retail buyers are sometimes controlled by a miniature profit and loss statement for each department or merchandise line. In an effort to make a profit, the buyer tries to forecast sales, merchandise costs, and expenses. The figure for "cost of merchandise" is the amount buyers have budgeted to spend over the budget period. If the money has not yet been spent, buyers are **open to buy**—that is, the buyers have budgeted funds that can be spent during the current period. However, if the budget has been spent, they are no longer in the market and no amount of special promotion or price-cutting is likely to induce them to buy.[26]

Buying and selling are closely related

In wholesale and retail firms, there is usually a very close relationship between buying and selling. Buyers are often in close contact with their firm's salespeople and with customers. The housewares buyer for a local department store, for example, may even supervise the salespeople who sell housewares. Salespeople are quick to tell the buyer if a customer wants a product that is not available—especially if the salespeople work on commission.

Resident buyers may help a firm's buyers

Resident buyers are independent buying agents who work in central markets (New York City, Paris, Rome, Hong Kong, Chicago, Los Angeles) for several retailer or wholesaler customers based in outlying areas or other countries. They buy new styles and fashions and fill-in items as their customers run out of stock during the year.

Resident buying organizations fill a need. They help small channel members (producers and middlemen) reach each other inexpensively. Resident buyers usually are paid an annual fee based on their purchases.

The Government Market

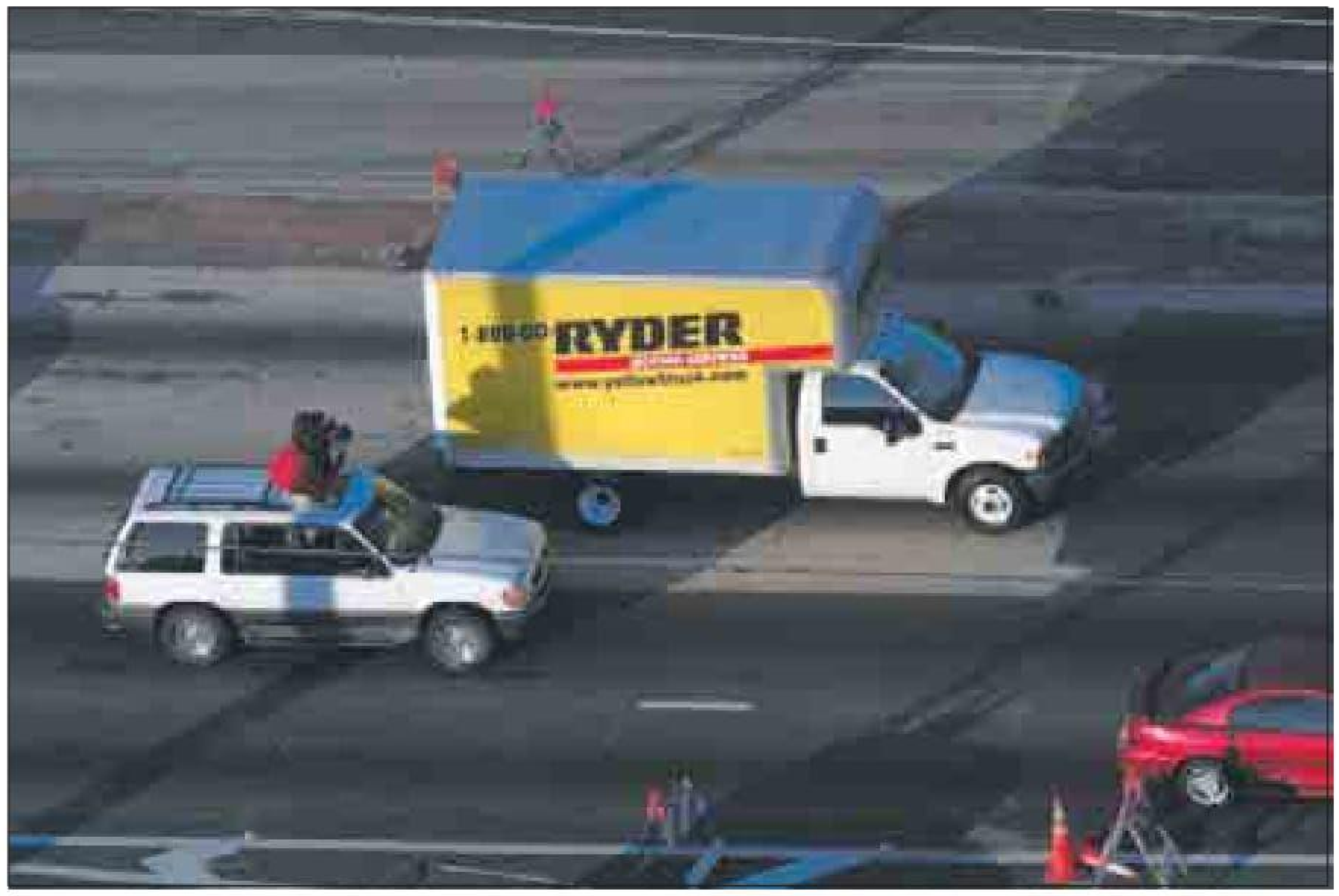
Size and diversity

Some marketers ignore the government market because they think that government red tape is more trouble than it's worth. They probably don't realize how big the government market really is. Government is the largest customer group in many countries—including the United States. About 35 percent of the U.S. gross national product is spent by various government units; the figure is much higher in some economies. Different government units in the United States spend about $2,866,000,000,000 (think about it!) a year to buy almost every kind of product. They run not only schools, police departments, and military organizations, but also supermarkets, public utilities, research laboratories, offices, hospitals, and even liquor stores. These huge government expenditures cannot be ignored by an aggressive marketing manager.

Competitive bids may be required

Government buyers in the United States are expected to spend money wisely—in the public interest—so their purchases are usually subject to much public review. To avoid charges of favoritism, most government customers buy by specification using a mandatory bidding procedure. Often the government buyer must accept the lowest bid that meets the specifications. You can see how important it is for the buyer to write precise and complete specifications. Otherwise, sellers may submit a bid that fits the specs but doesn't really match what is needed. By law, a government unit might have to accept the lowest bid—even for an unwanted product.

Writing specifications is not easy—and buyers usually appreciate the help of well-informed salespeople. Salespeople *want* to have input on the specifications so their product can be considered or even have an advantage. One company may get the business—even with a bid that is not the lowest—because the lower bids don't meet minimum specifications.



Government agencies are important customers for a wide variety of products, even rental truck services (for example, if they have to unexpectedly move ballot boxes from one place to another as was the case in Florida in the 2000 national election).

Rigged specs are an ethical concern

At the extreme, a government customer who wants a specific brand or supplier may try to write the description so that no other supplier can meet all the specs. The buyer may have good reasons for such preferences—a more reliable product, prompt delivery, or better service after the sale. This kind of loyalty sounds great, but marketers must be sensitive to the ethical issues involved. Laws that require government customers to get bids are intended to increase competition among suppliers, not reduce it. Specs that are written primarily to defeat the purpose of these laws may be viewed as illegal bid rigging.

The approved supplier list

Specification and bidding difficulties aren't problems in all government orders. Some items that are bought frequently—or for which there are widely accepted standards—are purchased routinely. The government unit simply places an order at a previously approved price. To share in this business, a supplier must be on the list of approved suppliers. The list is updated occasionally, sometimes by a bid procedure. Government units buy school supplies, construction materials, and gasoline this way. Buyers and sellers agree on a price that will stay the same for a specific period—perhaps a year.

Negotiated contracts are common too

Contracts may be negotiated for items that are not branded or easily described, for products that require research and development, or in cases where there is no effective competition. Depending on the government unit involved, the contract may be subject to audit and renegotiation, especially if the contractor makes a larger profit than expected.

Negotiation is often necessary when there are many intangible factors. Unfortunately, this is exactly where favoritism and influence can slip in. And such influence is not unknown—especially in city and state government. Nevertheless, negotiation is an important buying method in government sales—so a marketing mix should emphasize more than just low price.[27]

Learning what government wants

In the United States, there are more than 85,000 local government units (school districts, cities, counties, and states) as well as many federal agencies that make purchases. Keeping on top of all of them is nearly impossible. Potential suppliers should focus on the government units they want to cater to and learn the bidding methods of those units. Then it's easier to stay informed since most government contracts are advertised. Target marketing can make a big contribution here—making sure the marketing mixes are well matched with the different bidding procedures.

A marketer can learn a lot about potential government target markets from various government publications and by using the Internet. For example, there is an online government contractors' resource center at www.govcon.com. It includes a link to the online version of the U.S. federal government's *Commerce Business Daily*, which lists most current purchase bid requests. The Small Business Administration (www.sba.gov) offers many resources, including the *U.S. Purchasing, Specifications, and Sales Directory*. It explains government procedures to encourage competition for such business. Various state and local governments also offer guidance, as do government units in many other countries.

Trade magazines and trade associations provide information on how to reach schools, hospitals, highway departments, park departments, and so on. These are unique target markets and must be treated as such when developing marketing strategies.

Dealing with foreign governments

Selling to government units in foreign countries can be a real challenge. In many cases, a firm must get permission from the government in its own country to sell to a foreign government. Moreover, most government contracts favor domestic suppliers if they are available. Even if such favoritism is not explicit, public sentiment may make it very difficult for a foreign competitor to get a contract. Or the government bureaucracy may simply bury a foreign supplier in so much red tape that there's no way to win.

Is it unethical to "buy help"?

In some countries, government officials expect small payments (grease money) just to speed up processing of routine paperwork, inspections, or decisions from the local bureaucracy. Outright influence peddling—where government officials or their friends request bribe money to sway a purchase decision—is common in some markets. In the past, marketers from some countries have looked at such bribes as a cost of doing business. However, the **Foreign Corrupt Practices Act**, passed by the U.S. Congress in 1977, prohibits U.S. firms from paying bribes to foreign officials. A person who pays bribes, or authorizes an agent to pay them, can face stiff penalties. However, the law was amended in 1988 to allow small grease money payments if they are customary in a local culture. Further, a manager isn't held responsible if an agent in the foreign country secretly pays bribes. An ethical dilemma may arise if a marketing manager *thinks* that money paid to a foreign agent might be used, in part, to bribe a government official. However, most U.S. businesses have learned to live with this law—and in general they comply with its intent.[28]

Conclusion

In this chapter, we considered the number, size, location, and buying behavior of various types of organizational customers—to try to identify logical dimensions for segmenting markets and developing marketing mixes. We looked at who makes and influences organizational buying decisions, and how multiple influence may make the marketing job more difficult. We also saw that the nature of the buyer and the buying situation are relevant and that the problem-solving models of buyer behavior introduced in Chapter 6 apply here, with modifications.

Buying behavior—and marketing opportunities—may change when there's a close relationship between a supplier and a customer. However, close relationships are not an all-or-nothing thing. There are different ways that a supplier can build a closer relationship with its customers. We identified key dimensions of relationships and their benefits and limitations.

We also looked at how buyers use e-commerce in the buying process. Some capabilities, like interactive competitive bidding, have already had a major impact. And much progress is underway toward fostering more efficient relationships.

The chapter focuses on aspects of buying behavior that often apply to different types of organizational customers. However, we discussed some key differences in the manufacturer, services, middleman, and government markets.

A clear understanding of organizational buying habits, needs, and attitudes can aid marketing strategy planning. And since there are fewer organizational customers than final consumers, it may even be possible for some marketing managers (and their salespeople) to develop a unique strategy for each potential customer.

This chapter offers some general principles that are useful in strategy planning—but the nature of the products being offered may require adjustments in the plans. Different product classes are discussed in Chapter 9. Variations by product may provide additional segmenting dimensions to help a marketing manager fine-tune a marketing strategy.

Questions and Problems

1. In your own words, explain how buying behavior of business customers in different countries may have been a factor in speeding the spread of international marketing.
2. Compare and contrast the buying behavior of final consumers and organizational buyers. In what ways are they most similar and in what ways are they most different?
3. Briefly discuss why a marketing manager should think about who is likely to be involved in the buying center for a particular purchase. Is the buying center idea useful in consumer buying? Explain your answer.
4. If a nonprofit hospital were planning to buy expensive MRI scanning equipment (to detect tumors), who might be involved in the buying center? Explain your answer and describe the types of influence that different people might have.
5. Describe the situations that would lead to the use of the three different buying processes for a particular product—lightweight bumpers for a pickup truck.
6. Why would an organizational buyer want to get competitive bids? What are some of the situations when competitive bidding can't be used?
7. How likely would each of the following be to use competitive bids: *(a)* a small town that needed a road resurfaced, *(b)* a scouting organization that needed a printer to print its scouting handbook, *(c)* a hardware retailer that wants to add a new lawn mower line, *(d)* a grocery store chain that wants to install new checkout scanners, and *(e)* a sorority that wants to buy a computer to keep track of member dues? Explain your answers.
8. Discuss the advantages and disadvantages of just-in-time supply relationships from an organizational buyer's point of view. Are the advantages and disadvantages merely reversed from the seller's point of view?
9. Explain why a customer might be willing to work more cooperatively with a small number of suppliers rather than pitting suppliers in a competition against each other. Give an example that illustrates your points.
10. Would a tool manufacturer need a different marketing strategy for a big retail chain like Home Depot than for a single hardware store run by its owner? Discuss your answer.
11. How do you think a furniture manufacturer's buying habits and practices would be affected by the specific type of product to be purchased? Consider fabric for upholstered furniture, a lathe for the production line, cardboard for shipping cartons, and lubricants for production machinery.
12. Discuss the importance of target marketing when analyzing organizational markets. How easy is it to isolate homogeneous market segments in these markets?
13. Explain how NAICS codes might be helpful in evaluating and understanding business markets. Give an example.
14. Considering the nature of retail buying, outline the basic ingredients of promotion to retail buyers. Does it make any difference what kinds of products are involved? Are any other factors relevant?

15. The government market is obviously an extremely large one, yet it is often slighted or even ignored by many firms. Red tape is certainly one reason, but there are others. Discuss the situation and be sure to include the possibility of segmenting in your analysis.

16. Some critics argue that the Foreign Corrupt Practices Act puts U.S. businesses at a disadvantage when competing in foreign markets with suppliers from other countries that do not have similar laws. Do you think that this is a reasonable criticism? Explain your answer.

Suggested Cases

5. Republic Polymer Company
6. Three Rivers Steel Company

Computer-Aided Problem

7. **Vendor Analysis**

CompuTech, Inc., makes circuit boards for microcomputers. It is evaluating two possible suppliers of electronic memory chips.

The chips do the same job. Although manufacturing quality has been improving, some chips are always defective. Both suppliers will replace defective chips. But the only practical way to test for a defective chip is to assemble a circuit board and "burn it in"—run it and see if it works. When one chip on a board is defective at that point, it costs $2.00 for the extra labor time to replace it. Supplier 1 guarantees a chip failure rate of not more than 1 per 100 (that is, a defect rate of 1 percent). The second supplier's 2 percent defective rate is higher, but its price is lower.

Supplier 1 has been able to improve its quality because it uses a heavier plastic case to hold the chip. The only disadvantage of the heavier case is that it requires CompuTech to use a connector that is somewhat more expensive.

Transportation costs are added to the price quoted by either supplier, but Supplier 2 is further away so transportation costs are higher. And because of the distance, delays in supplies reaching CompuTech are sometimes a problem. To ensure that a sufficient supply is on hand to keep production going, CompuTech must maintain a backup inventory—and this increases inventory costs. CompuTech figures inventory costs—the expenses of finance and storage—as a percentage of the total order cost.

To make its vendor analysis easier, CompuTech's purchasing agent has entered data about the two suppliers on a spreadsheet. He based his estimates on the quantity he thinks he will need over a full year.

a. *Based on the results shown in the initial spreadsheet, which supplier do you think CompuTech should select? Why?*
b. *CompuTech estimates it will need 100,000 chips a year if sales go as expected. But if sales are slow, fewer chips will be needed. This isn't an issue with Supplier 2; its price is the same at any quantity. However, Supplier 1's price per chip will be $1.95 if CompuTech buys less than 90,000 during the year. If CompuTech only needs 84,500 chips, which supplier would be more economical? Why?*
c. *If the actual purchase quantity will be 84,500 and Supplier 1's price is $1.95, what is the highest price at which Supplier 2 will still be the lower-cost vendor for CompuTech? (Hint: You can enter various prices for Supplier 2 in the spreadsheet—or use the analysis feature to vary Supplier 2's price and display the total costs for both vendors.)*

For additional questions related to this problem, see Exercise 7-3 in the *Learning Aid for Use with Basic Marketing*, 14th edition.

When You Finish This Chapter, You Should

1. Know about marketing information systems.

2. Understand a scientific approach to marketing research.

3. Know how to define and solve marketing problems.

4. Know about getting secondary and primary data.

5. Understand the role of observing, questioning, and using experimental methods in marketing research.

6. Understand the important new terms (shown in red).

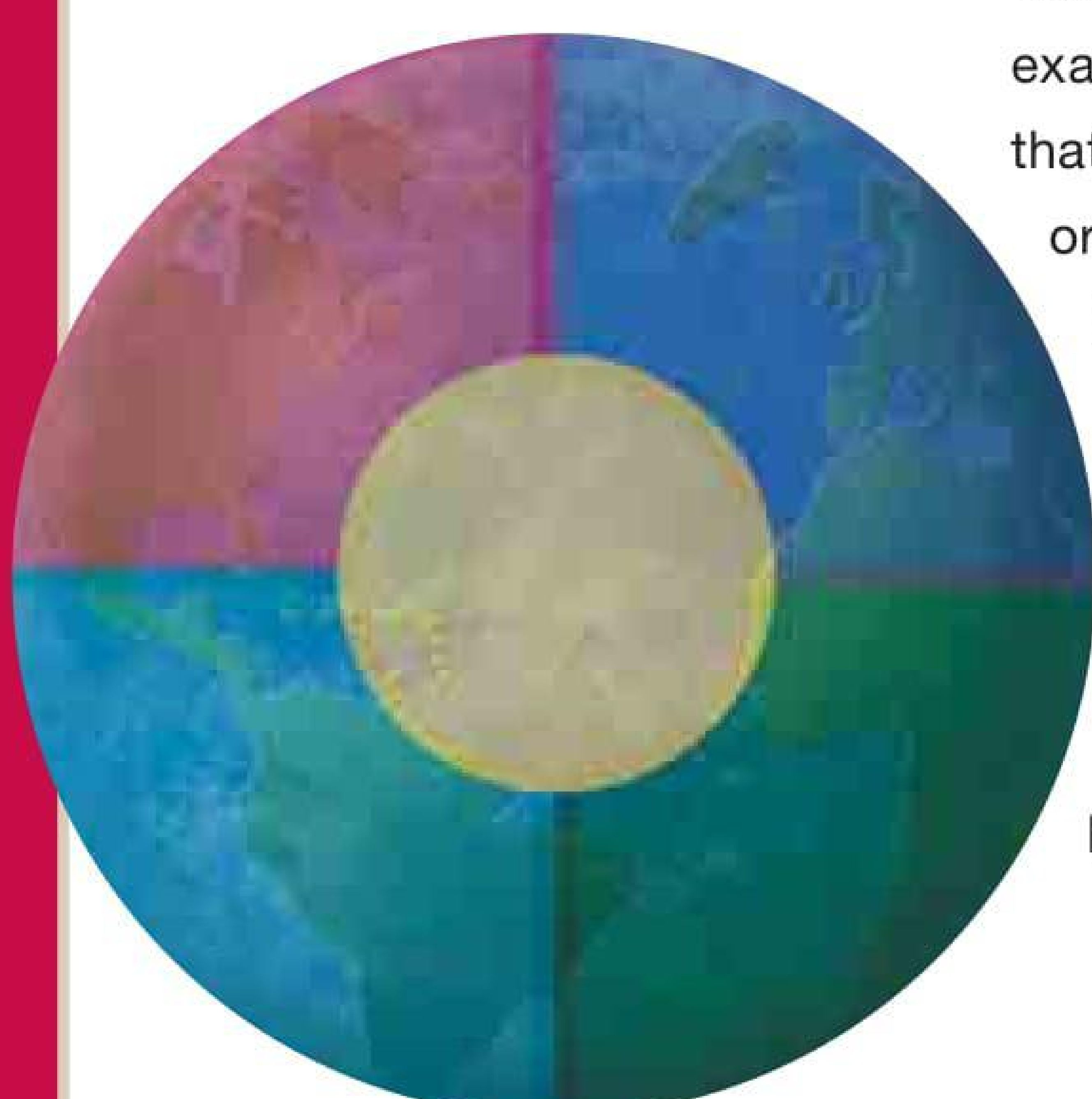
Chapter Eight

Improving Decisions with Marketing Information

With over 850 stores, LensCrafters has quickly become one of the largest chains of eyewear stores in the United States, Canada, and Puerto Rico.

A key to LensCrafters' success is that its managers use marketing research to better understand target market needs and to plan strategies. It's also easy for managers to get—and share—marketing information. That's because the company has its own intranet, and the information on it is constantly updated.

When LensCrafters was first evaluating the eye care market, a situation analysis revealed that there was a big opportunity. For example, library research revealed that 57 percent of people aged 18 or older wear eyeglasses, contact lenses, or both. Many also get sunglasses. Similarly, government statistics showed that demographic trends were favorable to long-run growth in the $10 billion a year eye care market.



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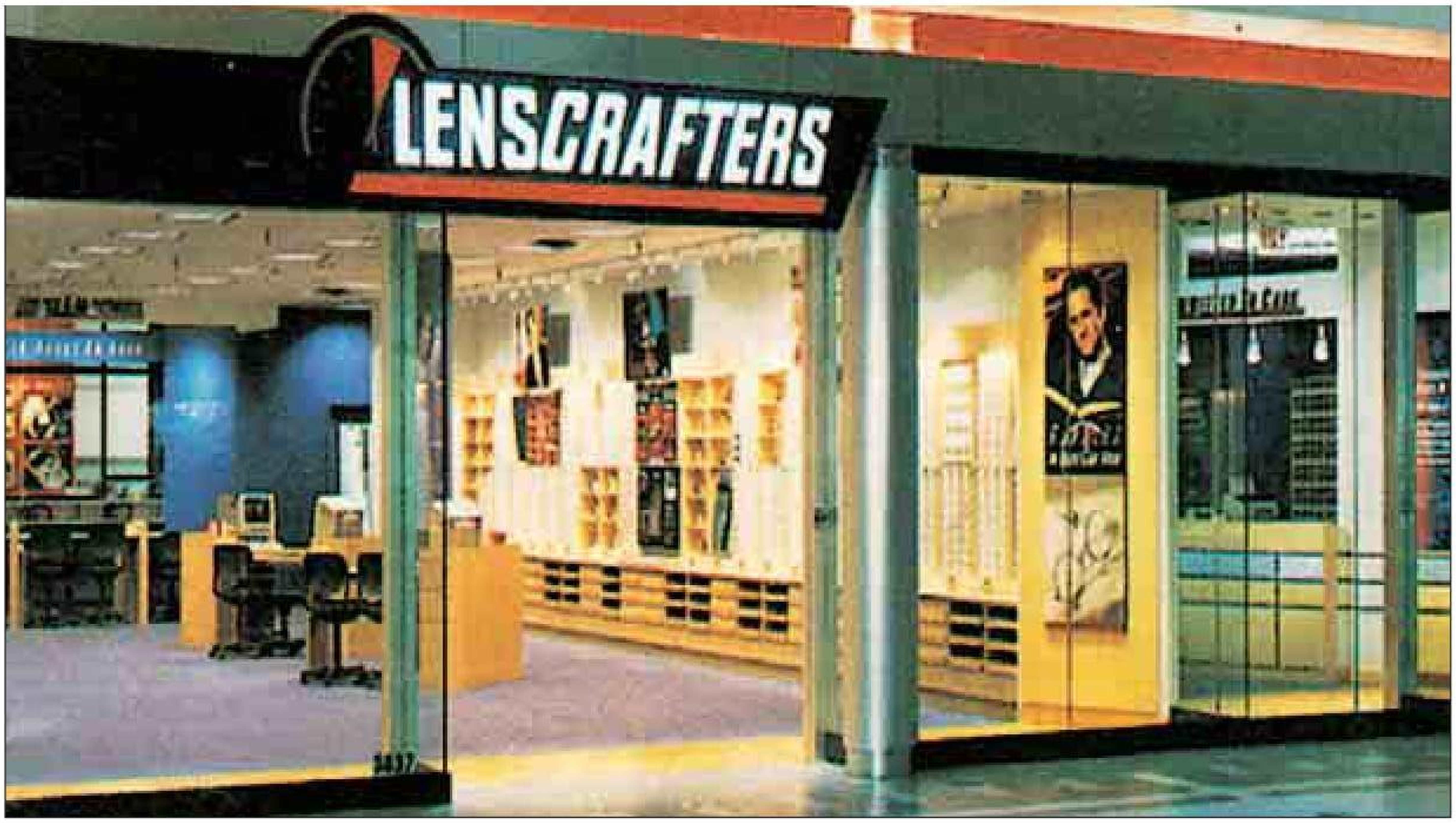


Subsequent LensCrafters research provided guidance for turning this opportunity into a marketing strategy. Focus group interviews and consumer surveys confirmed that most consumers viewed shopping for glasses as very inconvenient. Frame selections were too small, opticians' shops were typically closed when customers were off work and had time to shop, and the whole process usually required long waits and repeat trips. So LensCrafters put the labs that make the glasses right in its stores and kept the stores open nights and weekends. Ads tout LensCrafters' high-quality, one-hour service. With LensCrafters' new, patented Accu-Fit Measuring System, customers are assured of a perfect-fitting pair of glasses.

To be sure that service quality lives up to the advertising promises, LensCrafters sends a customer satisfaction survey to every customer. Surveys are analyzed by store and used to find out what's going on where. LensCrafters even ties satisfaction results to employee bonuses.

To make it convenient for more consumers to shop at LensCrafters, the chain has been aggressively opening new stores. The firm's Internet website (www.lenscrafters.com) offers a store locator. Because the size and growth rate of various age groups in a geographic market drive demand for vision products, LensCrafters analyzes demographic data to locate new stores where profit potential is greatest. And each store carries a very large selection of frame styles, lenses, and sunglasses tailored to the age, gender, and ethnic makeup of the local market.

Managers at LensCrafters also routinely analyze sales data that is available in the firm's marketing information system. By breaking down sales by product, store, and time period, they can spot buying trends early and plan for them.

Research also guides promotion decisions. For example, LensCrafters uses direct-mail advertising targeted to customers in segments where interest in its convenient eyeglass service is highest.

LensCrafters' new advertising and positioning is also based on research. The campaign is designed to encourage consumers to think of LensCrafters as "my personal vision place." The ads speak to the importance and value of vision care and foster LensCrafters' identity as the consumer's first choice for quality eye care and quality eyewear. The research shows that this message appeals to consumers and sets LensCrafters apart from competitors—who mainly rely on price-oriented messages about discounts and price points.[1]

The LensCrafters case shows that successful marketing strategies require information about potential target markets and their likely responses to marketing mixes as well as about competition and other marketing environment variables. Managers also need information for implementation and control. Without good information, managers are left to guess—and in today's fast-changing markets, that invites failure.

Radical Changes Are Underway in Marketing Information

Marketing managers for some companies make decisions based almost totally on their own judgment—with very little hard data. The manager may not even know that he or she is about to make the same mistake that the previous person in that job already made! When it's time to make a decision, they may wish they had more information. But by then it's too late, so they do without.

MIS makes information available and accessible

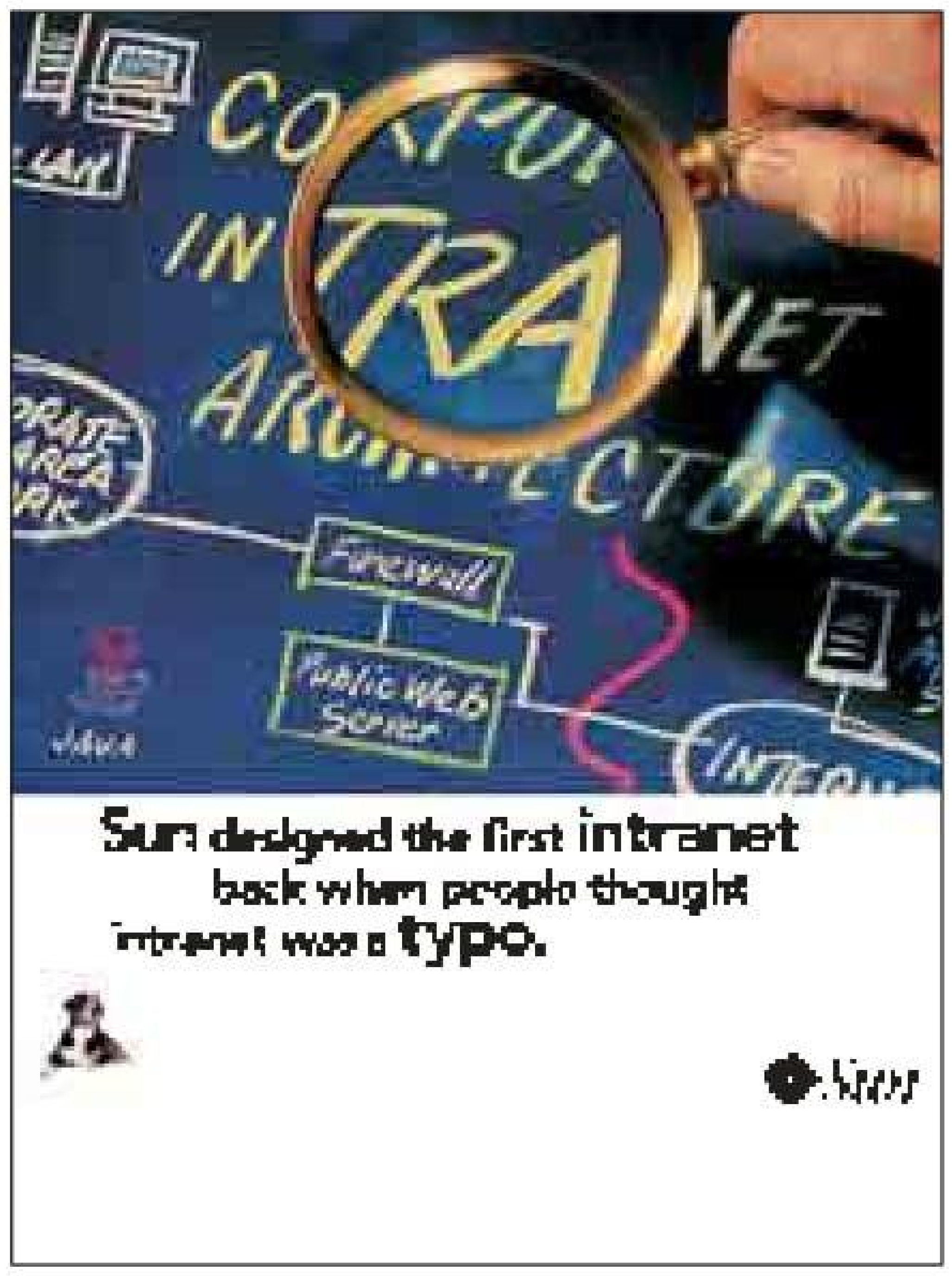
There is a difference between information that is *available* and information that is readily *accessible.* Some information—such as the details of competitors' plans—is just not available. Other information may be available, but not really accessible without a time-consuming effort. For example, a company may have file cabinets full of records of customer purchases, what was sold by sales reps last month, past marketing plans, or what is in the warehouse. In a sense, all of this information is available. But, if a manager can't quickly get this information when it's needed, it isn't useful. By contrast, making the same information instantly accessible over a computer network could be very useful.

Firms like LensCrafters realize that it doesn't pay to wait until you have important questions you can't answer. They anticipate the information they will need. They work to develop a *continual flow of information* that is available and quickly accessible when it's needed.

A **marketing information system (MIS)** is an organized way of continually gathering, accessing, and analyzing information that marketing managers need to make decisions.

We won't cover all of the technical details of planning for an MIS. That's beyond the scope of this course. But you should understand what an MIS is so you know some of the possibilities. So, we'll be discussing the elements of a complete MIS as

New developments in computer networks and software are making it easier for companies to gather and analyze marketing information.

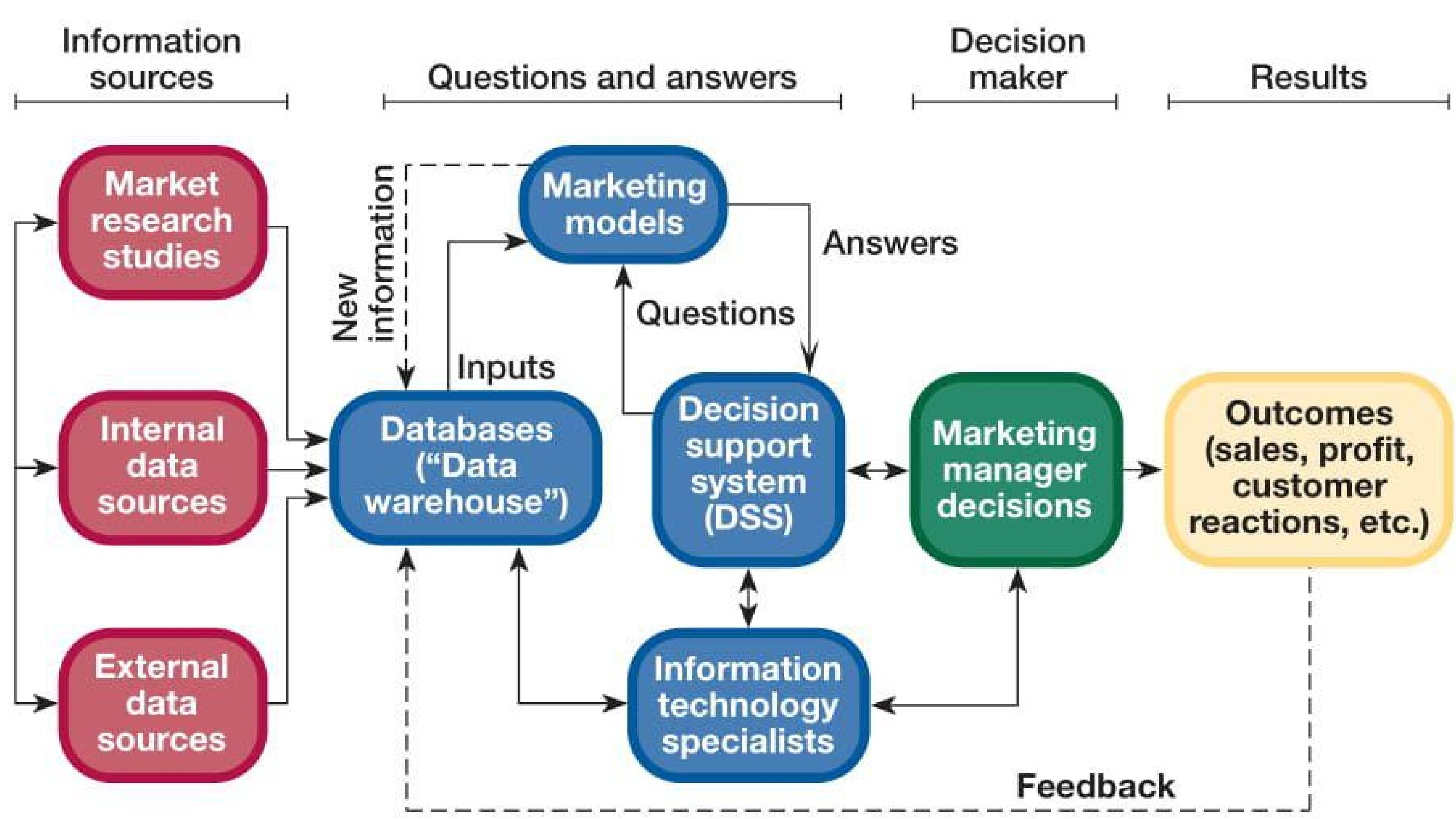


shown in Exhibit 8-1. As part of that review, we'll highlight how technology is changing MIS use.

Get more information—faster and easier

Basic MIS concepts are not very different today than they were 20 years ago. However, recent developments in information technology are having a *radical* impact on what information is available to marketing managers and how quickly. A big difference today is how easy it is to set up and use an MIS. A short time ago, connecting remote computers or exchanging data over networks was very difficult. Now, it's standard. And even a manager with little computer experience can quickly learn to use an MIS. As a result, managers everywhere have access to much more information. It's instantly available, and often just a mouse click away.

Exhibit 8-1
Elements of a Complete Marketing Information System



Equally important, the *type* of information available is changing dramatically. As recently as 1995, most marketing managers with information needs relied on computers mainly for number crunching. The multimedia revolution in computing has quickly lifted that limitation. Now it doesn't matter whether marketing information takes the form of a marketing plan, report, memo, spreadsheet, database, presentation, photo, graphic, or table of statistics. It is all being created on computer. So it can be easily stored and accessed by computer. Moreover, programs exist to help find whatever information is available—even if it is "lost" on the computer hard drive of a manager in an office across the ocean. When we talk about a database of marketing information, keep in mind that it may include all types of information, not just numbers.

An intranet is easy to update

We covered some of the important ways that the Internet is making more information available and changing marketing. In addition, many firms, even very small ones, have their own **intranet**—a system for linking computers within a company. An intranet works like the Internet. However, to maintain security, access to websites on an intranet is usually limited to employees. Even so, information is available on demand. Further, it's a simple matter to "publish" new information to a website as it becomes available. So, information can be constantly updated. Prior to this decade managers could only dream about this sort of capability.

Information technology is expanding what an MIS can do and how well it works. Even so, you seldom have all the information you need. Both customers and competitors can be unpredictable. Getting the precise information you want may cost too much or take too long. For example, data on international markets is often incomplete, outdated, or difficult to obtain. So a manager often must decide what information is really critical and how to get it.

Marketing managers must help develop an MIS

Computers are getting easier to use, but setting up and supporting an MIS still requires technical skill. In fact, converting an existing MIS to take advantage of Internet capabilities can be a real challenge. So in some companies, an MIS is set up by a person or group that provides *all* departments in the firm with information technology support. Or it may be set up by marketing specialists.

These specialists are important, but the marketing manager should play an important role, too. Marketing managers may not know in advance exactly what questions they will have or when. But they do know what data they've routinely used or needed in the past. They can also foresee what types of data might be useful. They should communicate these needs to the specialists so the information will be there when they want it and in the form they want it.

Decision support systems put managers online

An MIS system organizes incoming information into a **data warehouse**—a place where databases are stored so that they are available when needed. You can think of a data warehouse as a sort of electronic library, where all of the information is indexed extremely well. Firms with an MIS often have information technology specialists who help managers get specialized reports and output from the warehouse. However, to get better decisions, most MIS systems now provide marketing managers with a decision support system. A **decision support system (DSS)** is a computer program that makes it easy for a marketing manager to get and use information *as he or she is making decisions*.

A decision support system usually involves some sort of **search engine**—a computer program that helps a marketing manager find information that is needed. Often, the manager provides a word or phrase to guide the search. For example, a manager who wants sales data for the previous week or day might search for any database or computer file that references the term *unit sales* as well as the relevant data. The search engine would identify any files where that term appeared. If there were many, the manager could narrow the search further (say by specifying the product of interest), or the manager could briefly review the files to find the most appropriate one.

When the search is focused on numerical data, simply finding the information may not go far enough. Thus, a DSS typically helps change raw data—like product sales for the previous day—into more *useful information*. For example, it may draw graphs to show relationships in data—perhaps comparing yesterday's sales to the sales on the same day in the last four weeks. The MIS that managers at Frito-Lay use illustrates the possibilities.

All of Frito-Lay's salespeople are equipped with hand-held computers. Throughout the day they input sales information at the stores they visit. In the evening they send all the data over telephone lines to a central computer, where it is analyzed. Within 24 hours marketing managers at headquarters and in regional offices get reports and graphs that summarize how sales went the day before—broken down by brands and locations. The information system even allows a manager to zoom in and take a closer look at a problem in Peoria or a sales success in Sacramento.[2]

Some decision support systems go even further. They allow the manager to see how answers to questions might change in various situations. For example, a manager at Kraft Foods may want to estimate how much sales will increase if the firm uses a certain type of promotion in a specific market area. The DSS will ask the manager for a *personal* judgment about how much business could be won from each competitor in that market. Then, using this input and drawing on data in the database about how the promotion had worked in other markets, the system will make a sales estimate using a marketing model. A **marketing model** is a statement of relationships among marketing variables.

In short, the decision support system puts managers online so they can study available data and make better marketing decisions—faster.[3]

Information makes managers greedy for more

Once marketing managers see how a functioning MIS—and perhaps a DSS—can help their decision making, they are eager for more information. They realize that they can improve all aspects of their planning—blending individual Ps, combining the four Ps into mixes, and developing and selecting plans. Further, they can monitor the implementation of current plans, comparing results against plans and making necessary changes more quickly. (Note: The sales and cost analysis techniques discussed in Chapter 18 are often used in an MIS.) Marketing information systems will become more widespread as managers become more sensitive to the possibilities and as more information is available in a form that makes it easy to transfer from one computer program format to another. This may seem like a small problem, but it has been a big stumbling block for many firms.

Many firms are not there yet

Of course, not every firm has a complete MIS system. And in some firms that do, managers don't know how to use what's there. A major problem is that many managers are used to doing it the old way—and they don't think through what information they need.

One sales manager thought he was progressive when he asked his assistant for a report listing each sales rep's sales for the previous month and the current month. The assistant quickly found the relevant information on the firm's intranet, put it into an Excel spreadsheet, and printed out the report. Later, however, she was surprised to see the sales manager working on the list with a calculator. He was figuring the percentage change in sales for the month and ranking the reps from largest increase in sales to smallest. The spreadsheet software could have done all of that—instantly—but the sales manager got what he *asked for*, not what he really needed. An MIS can provide information—but only the marketing manager knows what problem needs solving. It's the job of the manager—not the computer or the MIS specialist—to ask for the right information in the right form.

MIS use is growing rapidly

Some people think that only large firms can develop an effective MIS. In fact, just the opposite may be true. Big firms with complicated marketing programs often face a challenge trying to develop an MIS from scratch. And once a large firm has a system in place it may be very costly to switch to something better. It can be easier for small firms because they are often more focused. They can get started with a simple system and then expand it as needs expand. There is a lot of opportunity in this area for students who are able and willing to apply computer skills to solve real marketing problems.[4]

New questions require new answers

MIS systems tend to focus on recurring information needs. Routinely analyzing such information can be valuable to marketing managers. But it shouldn't be their only source of information for decision making. They must try to satisfy ever-changing needs in dynamic markets. So marketing research must be used—to supplement data already available and accessible through the MIS.

What Is Marketing Research?

Research provides a bridge to customers

The marketing concept says that marketing managers should meet the needs of customers. Yet today, many marketing managers are isolated in company offices—far from potential customers.

This means marketing managers have to rely on help from **marketing research**—procedures to develop and analyze new information to help marketing managers make decisions. One of the important jobs of a marketing researcher is to get the "facts" that are not currently available in the MIS.

Who does the work?

Most large companies have a separate marketing research department to plan and carry out research projects. These departments often use outside specialists—including interviewing and tabulating services—to handle technical assignments. Further, they may call in specialized marketing consultants and marketing research organizations to take charge of a research project.

Small companies (those with less than \$4 or \$5 million in sales) usually don't have separate marketing research departments. They often depend on their sales people or managers to conduct what research they do.

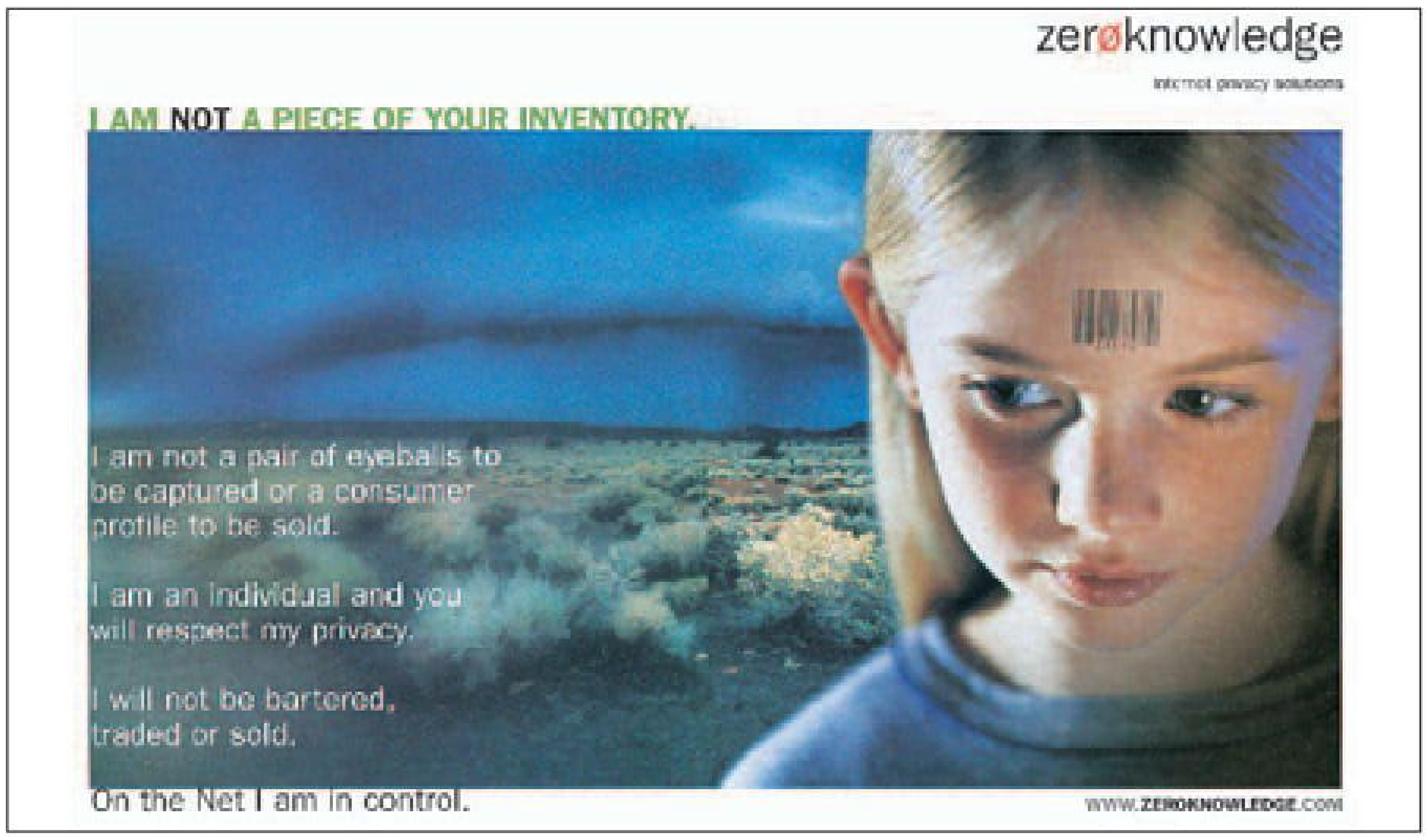
Some nonprofit organizations have begun to use marketing research—usually with the help of outside specialists. For example, many politicians rely on research firms to conduct surveys of voter attitudes.[5]

Ethical issues in marketing research

The basic reason for doing marketing research is to get information that people can trust in making decisions. But as you will see in this chapter, research often involves many hidden details. A person who wants to misuse marketing research to pursue a personal agenda can often do so.

Perhaps the most common ethical issues concern decisions to withhold certain information about the research. For example, a manager might selectively share only those results that support his or her viewpoint. Others involved in a decision might never know that they are getting only partial truths. Or during a set of interviews, a researcher may discover that consumers are interpreting a poorly worded question many different ways. If the researcher doesn't admit the problem, an unknowing manager may rely on meaningless results.

Another problem involves more blatant abuses. It is unethical for a firm to contact consumers under the pretense of doing research when the real purpose is to sell something. For example, some political organizations have been criticized for surveying consumers to find out their attitudes about various political candidates and



Developments in information technology are making it easier to gather information about customers, but marketers need to be sensitive to concerns that some consumers and critics have about privacy. Zero-Knowledge, the Canadian company featured here, positions itself as the "consumer's advocate on privacy."

issues. Then, armed with that information, someone else calls back to solicit donations. Legitimate marketing researchers don't do this!

The relationship between the researcher and the manager sometimes creates an ethical conflict. Managers must be careful not to send a signal that the only acceptable results from a research project are ones that confirm their existing viewpoints. Researchers are supposed to be objective, but that objectivity may be swayed if future jobs depend on getting the "right" results.[6]

Effective research usually requires cooperation

Good marketing research requires cooperation between researchers and marketing managers. Researchers must be sure their research focuses on real problems.

Marketing managers must be able to explain what their problems are and what kinds of information they need. They should be able to communicate with specialists in the specialists' language. Marketing managers may only be "consumers" of research. But they should be informed consumers—able to explain exactly what they want from the research. They should also know about some of the basic decisions made during the research process so they know the limitations of the findings.

For this reason, our discussion of marketing research won't emphasize mechanics but rather how to plan and evaluate the work of marketing researchers.[7]

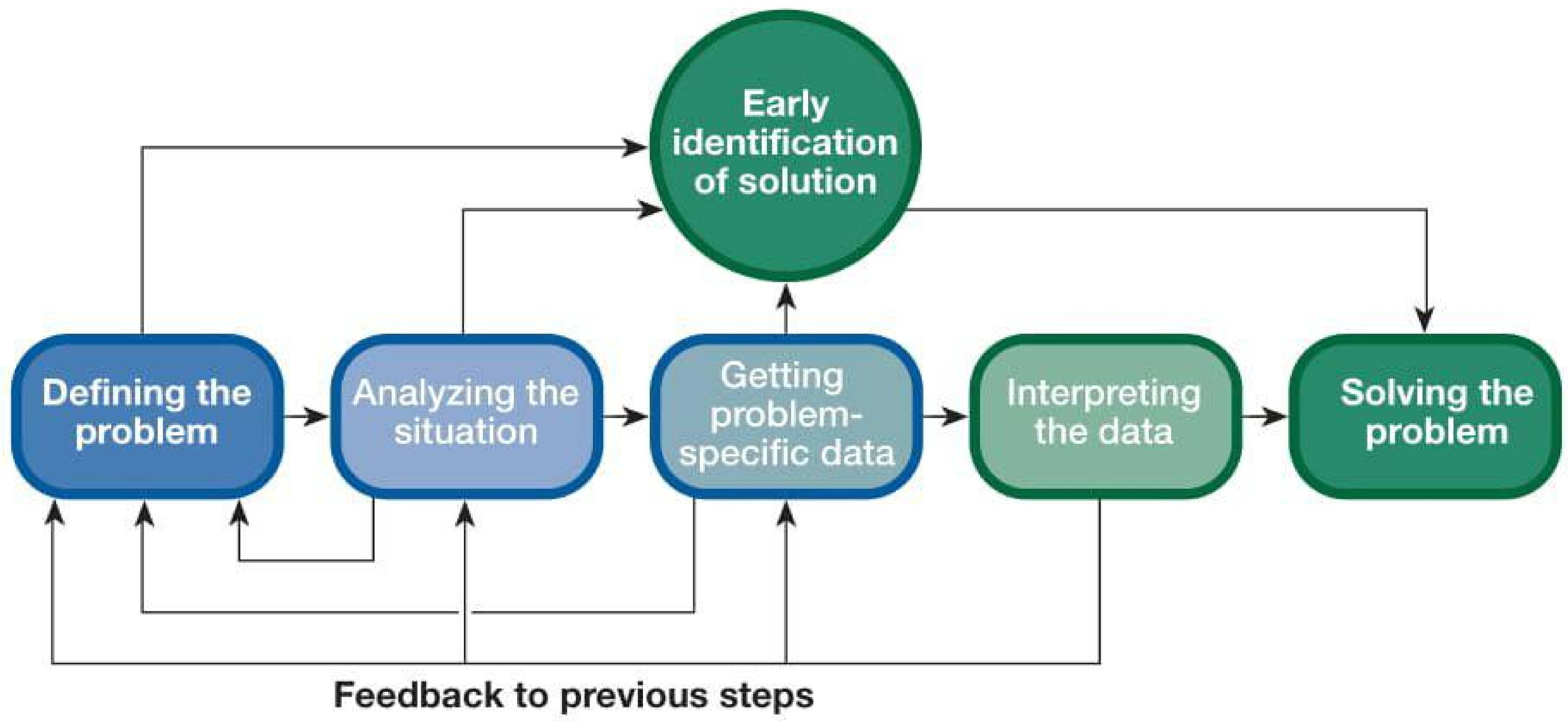
The Scientific Method and Marketing Research

The scientific method—combined with the strategy planning framework we discussed in Chapter 2—can help marketing managers make better decisions.

The **scientific method** is a decision-making approach that focuses on being objective and orderly in *testing* ideas before accepting them. With the scientific method, managers don't just *assume* that their intuition is correct. Instead, they use their intuition and observations to develop **hypotheses**—educated guesses about the relationships between things or about what will happen in the future. Then they test their hypotheses before making final decisions.

A manager who relies only on intuition might introduce a new product without testing consumer response. But a manager who uses the scientific method might say, "I think (hypothesize) that consumers currently using the most popular brand will prefer our new product. Let's run some consumer tests. If at least 60 percent of the

Exhibit 8-2
Five-Step Scientific Approach to Marketing Research Process



consumers prefer our product, we can introduce it in a regional test market. If it doesn't pass the consumer test there, we can make some changes and try again."

The scientific method forces an orderly research process. Some managers don't carefully specify what information they need. They blindly move ahead—hoping that research will provide "the answer." Other managers may have a clearly defined problem or question but lose their way after that. These hit-or-miss approaches waste both time and money.

Five-Step Approach to Marketing Research

The **marketing research process** is a five-step application of the scientific method that includes:

1. Defining the problem.
2. Analyzing the situation.
3. Getting problem-specific data.
4. Interpreting the data.
5. Solving the problem.

Exhibit 8-2 shows the five steps in the process. Note that the process may lead to a solution before all of the steps are completed. Or as the feedback arrows show, researchers may return to an earlier step if needed. For example, the interpreting step may point to a new question—or reveal the need for additional information—before a final decision can be made.

Defining the Problem—Step 1

Defining the problem is often the most difficult step in the marketing research process. But it's important for the objectives of the research to be clearly defined. The best research job on the wrong problem is wasted effort.

Finding the right problem level almost solves the problem

The strategy planning framework introduced in Chapter 2 can be useful here. It can help the researcher identify the real problem area and what information is needed. Do we really know enough about our target markets to work out all of the four Ps? Do we know enough to decide what celebrity to use in an ad or how to handle a price war in New York City or Tokyo? If not, we may want to do research rather than rely on intuition.

The importance of understanding the problem—and then trying to solve it—can be seen in the introduction of Fab One Shot, a laundry product developed to clean, soften, and reduce static cling all in one step. Marketing managers were sure that Fab One Shot was going to appeal to heavy users—especially working women with large families. Research showed that 80 percent of these women used three different laundry products for the family wash, but they were looking for more convenience.

When marketing managers found that other firms were testing similar products, they rushed Fab One Shot into distribution. To encourage first-time purchases, they offered introductory price discounts, coupons, and rebates. And they supported the sales promotion with heavy advertising on TV programs that research showed the heavy users watched.

However, research never addressed the problem of how the heavy user target market would react. After the introductory price-off deals were dropped, sales dropped off too. While the product was convenient, heavy users weren't willing to pay the price—about 25 cents for each washload. For the heavy users, price was a qualifying dimension. And these consumers didn't like Fab's premeasured packets because they had no control over how much detergent they could put in. The competing firms recognized these problems at the research stage and decided not to introduce their products.

After the fact, it was clear that Fab One Shot was most popular with college students, singles, and people living in small apartments. They didn't use much—so the convenience benefit offset the higher price. But the company never targeted those segments. It just assumed that it would be profitable to target the big market of heavy users.[8]

The moral of this story is that our strategy planning framework is useful for guiding the problem definition step—as well as the whole marketing research process. First, a marketing manager should understand the target market and what needs the firm can satisfy. Then the manager can focus on lower-level problems—namely, how sensitive the target market is to a change in one or more of the marketing mix ingredients. Without such a framework, marketing researchers can waste time, and money, working on the wrong problem.

Don't confuse problems with symptoms

The problem definition step sounds simple—and that's the danger. It's easy to confuse symptoms with the problem. Suppose a firm's MIS shows that the company's sales are decreasing in certain territories while expenses are remaining the same—resulting in a decline in profits. Will it help to define the problem by asking: How can we stop the sales decline? Probably not. This would be like fitting a hearing-impaired patient with a hearing aid without first trying to find out *why* the patient was having trouble hearing.

It's easy to fall into the trap of mistaking symptoms for the problem. When this happens, the research objectives are not clear, and researchers may ignore relevant questions—while analyzing unimportant questions in expensive detail.

Setting research objectives may require more understanding

Sometimes the research objectives are very clear. A manager wants to know if the targeted households have tried a new product and what percent of them bought it a second time. But research objectives aren't always so simple. The manager might also want to know *why* some didn't buy or whether they had even heard of the product. Companies rarely have enough time and money to study everything. A manager must narrow the research objectives. One good way is to develop a list of research questions that includes all the possible problem areas. Then the manager can consider the items on the list more completely—in the situation analysis step—before narrowing down to final research objectives.

Analyzing the Situation—Step 2

What information do we already have?

When the marketing manager thinks the real problem has begun to surface, a situation analysis is useful. A **situation analysis** is an informal study of what information is already available in the problem area. It can help define the problem and specify what additional information, if any, is needed.

Pick the brains around you

The situation analysis usually involves informal talks with informed people. Informed people can be others in the firm, a few good middlemen who have close contact with customers, or others knowledgeable about the industry. In industrial markets—where relationships with customers are close—researchers may even call the customers themselves.

Situation analysis helps educate a researcher

The situation analysis is especially important if the researcher is a research specialist who doesn't know much about the management decisions to be made or if the marketing manager is dealing with unfamiliar areas. They both must be sure they understand the problem area—including the nature of the target market, the marketing mix, competition, and other external factors. Otherwise, the researcher may rush ahead and make costly mistakes or simply discover facts that management already knows. The following case illustrates this danger.

A marketing manager at the home office of a large retail chain hired a research firm to do in-store interviews to learn what customers liked most, and least, about some of its stores in other cities. Interviewers diligently filled out their questionnaires. When the results came in, it was apparent that neither the marketing manager nor the researcher had done their homework. No one had even talked with the local store managers! Several of the stores were in the middle of some messy remodeling—so all the customers' responses concerned the noise and dust from the construction. The research was a waste of money.

Secondary data may provide the answers—or some background

The situation analysis should also find relevant **secondary data**—information that has been collected or published already. Later, in Step 3, we will cover **primary data**—information specifically collected to solve a current problem. Too often researchers rush to gather primary data when much relevant secondary information is already available—at little or no cost! See Exhibit 8-3.

Much secondary data is available

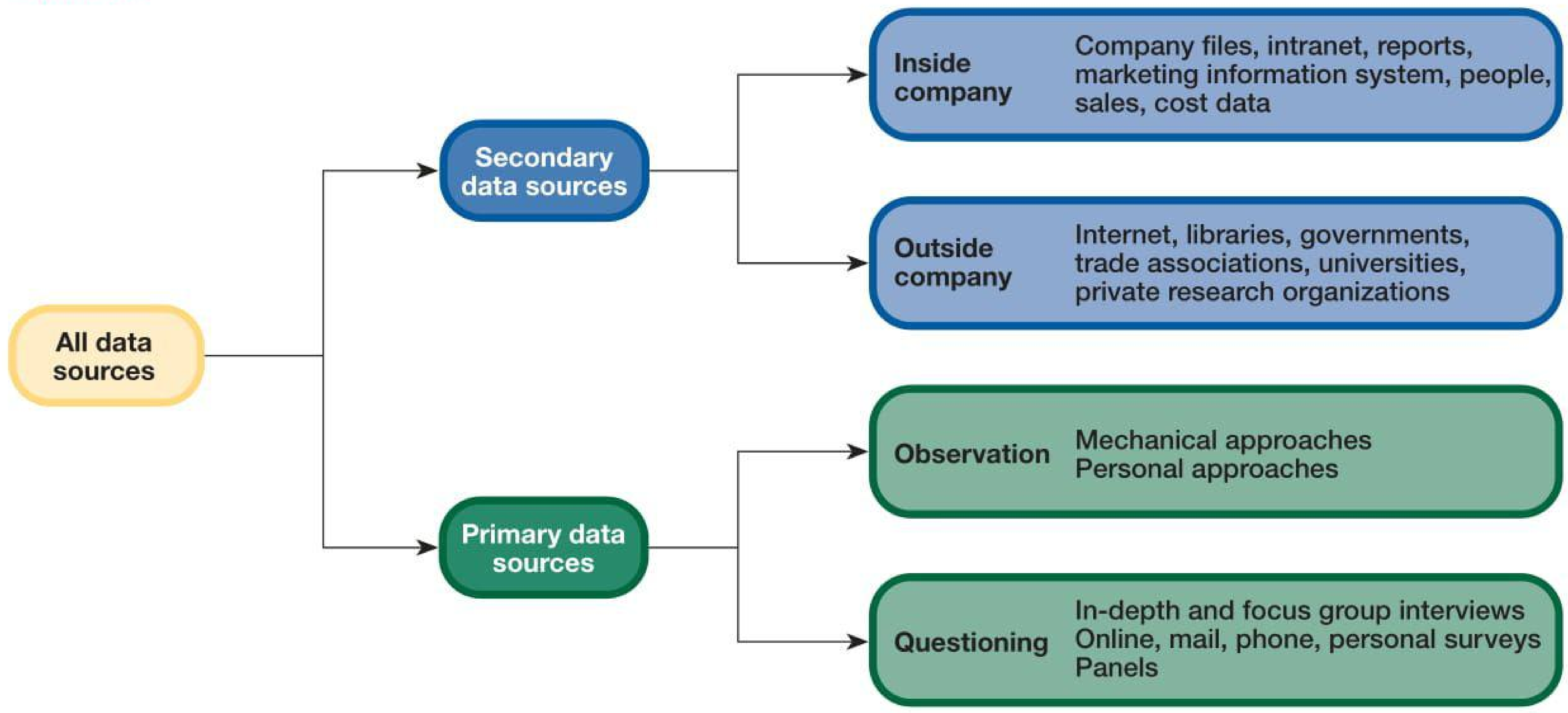
Ideally, much secondary data is already available from the firm's MIS. Data that has not been organized in an MIS may be available from the company's files and reports. Secondary data also is available from libraries, trade associations, government agencies, and private research organizations; increasingly, these organizations are putting their information online. So one of the first places a researcher should look for secondary data is on the Internet.

Search engines find information on the Internet

Although much information relevant to your situation analysis may be on the Internet, it won't do you much good if you can't find it. Fortunately, there are a number of good tools for searching on the Internet and reference books that explain the details of the different tools. However, the basic idea is simple. And, usually, the best way to start is to use a search engine.

Most popular Internet browsers, like Netscape Navigator and Microsoft Internet Explorer, have a menu selection or button to activate an Internet search. In addition, there are hundreds of more specialized search engines. In general a user specifies words or a phrase to find and the search engine produces a list of hyperlinks to websites where that search string is found. Usually all you do is type in the search string, click on search, wait while the reference list of links is assembled, and

Exhibit 8-3 Sources of Secondary and Primary Data



then click on the hyperlink of interest. Then the browser shows the relevant page for that hyperlink on screen. If you want, you can go back to the list and check out another hyperlink.

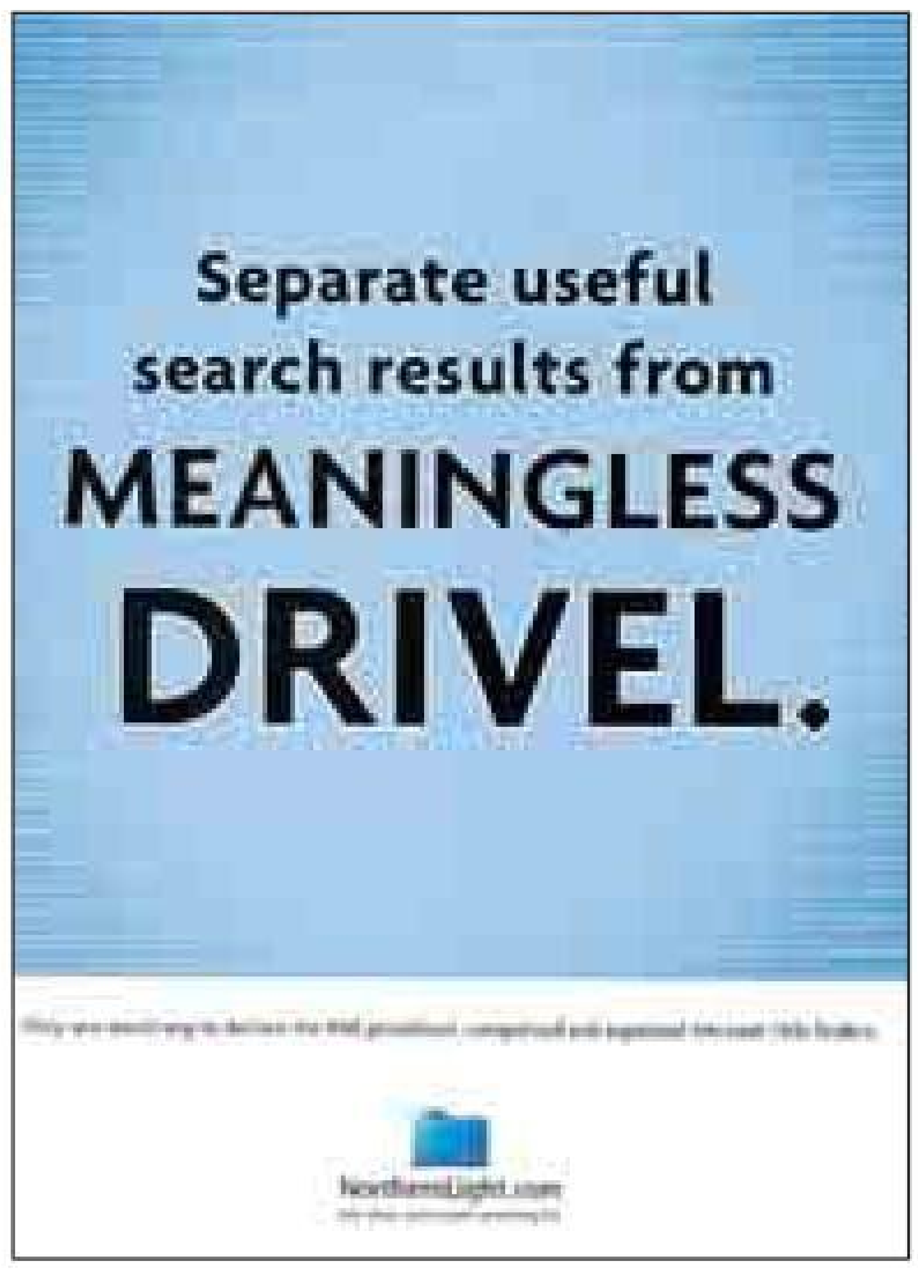
One of the most popular and useful search engines is at the website for Yahoo (www.yahoo.com). It is especially good at searching for web pages. Another very useful search engine is at the AltaVista website (www.altavista.digital.com); it does a good job of classifying online documents that include the search string. A search engine that is particularly useful for locating specific people or businesses is at www.hotbot.lycos.com. The Northern Light search engine (www.northernlight.com) is very good at identifying published articles on the search topic. Keep in mind, however, that these are just a few of the popular search engines. In fact, if you want to get an idea of how many are available—and how they are different—go to www.yahoo.com and do a search on the term *search engine*.[9]

Most computerized database and index services are now available over the Internet. Some of these are provided by libraries and private firms. For instance, for a fee a user can use Dow Jones' interactive news retrieval system (www.djnr.com) to search the full text of hundreds of publications, including newspapers from around the world. ProQuest Direct, at www.proquest.com, is another valuable research tool. It provides access to one of the world's largest collections of information, including summaries of articles from over 5,000 publications. Many articles are available in full text, full image format.

Internet

Internet Exercise Assume that your boss has asked you to do a customer satisfaction survey. As part of a situation analysis, you want to get ideas about what others have done in this area. Go to the website for the Yahoo search engine (www.yahoo.com). In the dialogue box type 'customer satisfaction survey' (include the single quote marks) and click on search. Look at some of the websites identified. How helpful is this? How could it be improved?

The Internet is dramatically changing how marketing managers get both primary and secondary data.



Government data is inexpensive

Federal and state governments publish data on many subjects. Government data is often useful in estimating the size of markets. In Chapter 5 we gave a number of examples of the different types of data that are available and suggested websites. Distribution of government data is not limited to the Internet, however. Almost all government data is available in inexpensive publications. Much of it is also available in computer form ready for further analysis.

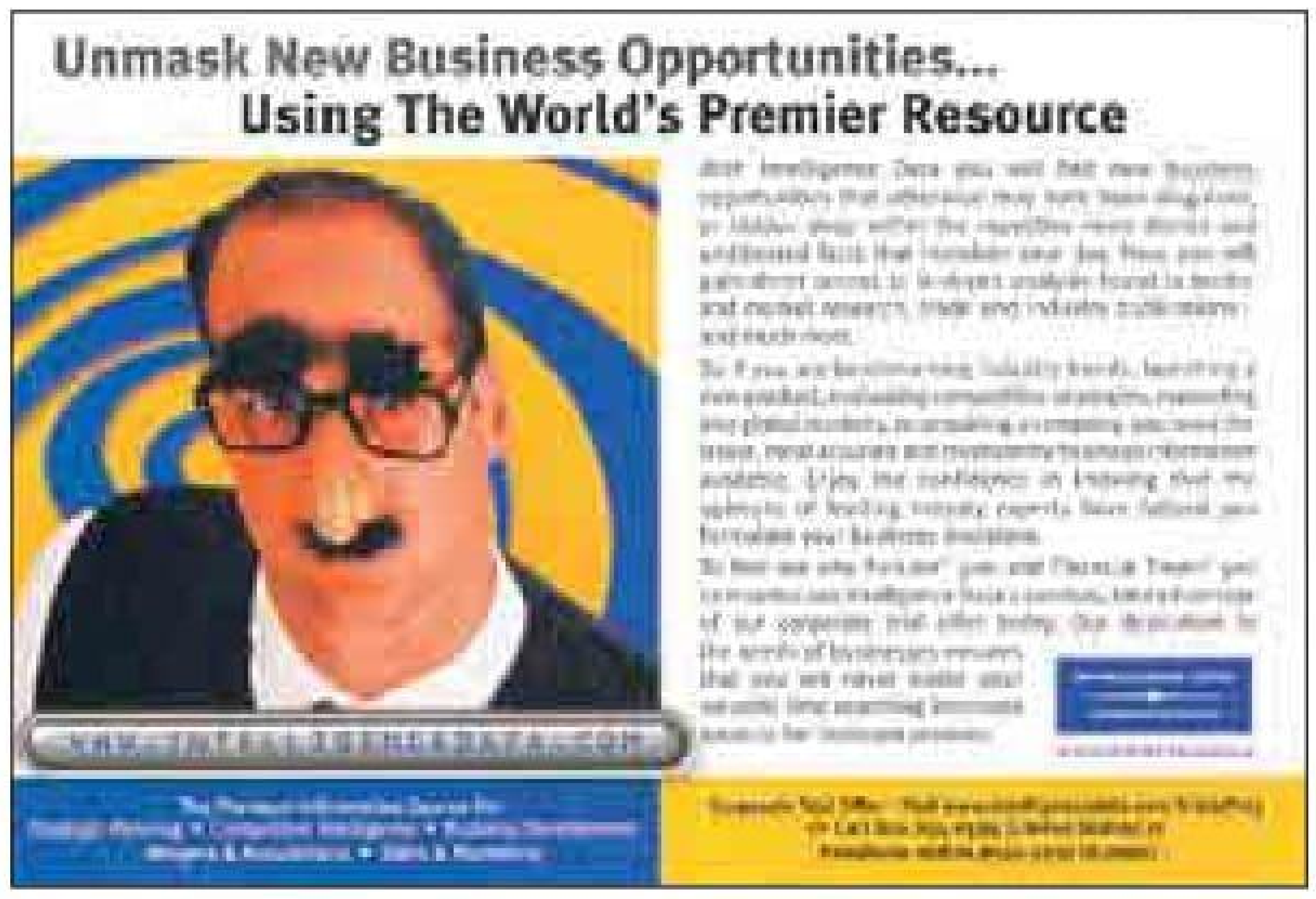
Sometimes it's more practical to use summary publications for leads to more detailed reports. For the U.S. market, one of the most useful summary references is the *Statistical Abstract of the United States*. Like an almanac, it is issued in print form each year and gives 1,500 summary tables from more than 200 published sources. Detailed footnotes guide readers to more specific information on a topic. The abstract and much of the source material on which it is based are available online at www.census.gov. Similarly, the *United Nations Statistical Yearbook* is one of the finest summaries of worldwide data; like many other international statistical references, it is available on CD-ROM and online (www.un.org/depts/unsd).

Secondary data is very limited on some international markets. However, most countries with advanced economies have government agencies that help researchers get the data they need. For example, Statistics Canada (www.statcan.ca) compiles a great deal of information on the Canadian market. Eurostat (europa.eu.int/comm/eurostat), the statistical office for the European Union countries, and the Organization for Economic Cooperation (in Paris) offer many publications packed with data on Europe. In the United States, the Department of Commerce (www.doc.gov) distributes statistics compiled by all other federal departments. Some city and state governments have similar agencies for local data. The Yahoo website (www.yahoo.com) provides an index to a large amount of information about different governments.

Private sources are useful too

Many private research organizations—as well as advertising agencies, newspapers, and magazines—regularly compile and publish data. A good business library is valuable for sources such as *Sales & Marketing Management*, *Advertising Age*, *Journal of Global Marketing*, and the publications of the National Industrial Conference Board.

The *Encyclopedia of Associations* lists 75,000 U.S. and international trade and professional associations that can be a good source of information. For example, the American Marketing Association (www.ama.org) has an information center with many marketing publications.



Much of the information that a marketing manager needs to solve a problem may already be available, if the manager knows where to look. Specialized research firms, like Intelligence Data, can help in that search.

Most trade associations compile data from and for their members. Some also publish magazines that focus on important topics in the industry. *Chain Store Age*, for example, has much information on retailing (www.chainstoreage.com).

Standard & Poor's Industry Surveys is another source of information on whole industries. And the local telephone company or your library usually has copies of the Yellow Pages for many cities; Yellow Page listings are also available on the Internet. Similarly, a number of firms sell computer CD-ROMs that include all of the businesses in the country. Resources such as these may be a big help in estimating the amount of competition in certain lines of business and where it is located.[10]

Situation analysis yields a lot—for very little

The virtue of a good situation analysis is that it can be very informative but takes little time. And it's inexpensive compared with more formal research efforts—like a large-scale survey. Situation analysis can help focus further research or even eliminate the need for it entirely. The situation analyst is really trying to determine the exact nature of the situation and the problem.

Determine what else is needed

At the end of the situation analysis, you can see which research questions—from the list developed during the problem definition step—remain unanswered. Then you have to decide exactly what information you need to answer those questions and how to get it.

This may require discussion between technical experts and the marketing manager. Often companies use a written **research proposal**—a plan that specifies what information will be obtained and how—to be sure no misunderstandings occur later. The research plan may include information about costs, what data will be collected, how it will be collected, who will analyze it and how, and how long the process will take. Then the marketing manager must decide if the time and costs involved are worthwhile. It's foolish to pay $100,000 for information to solve a $50,000 problem!

Getting Problem-Specific Data—Step 3

Gathering primary data

The next step is to plan a formal research project to gather primary data. There are different methods for collecting primary data. Which approach to use depends on the nature of the problem and how much time and money are available.

In most primary data collection, the researcher tries to learn what customers think about some topic or how they behave under some conditions. There are two basic methods for obtaining information about customers: *questioning* and *observing*. Questioning can range from qualitative to quantitative research. And many kinds of observing are possible.

When John Deere does focus group research for its bulldozer line, customers have a chance to see and discuss what's different about Deere's product.

Qualitative questioning—open-ended with a hidden purpose

Qualitative research seeks in-depth, open-ended responses, not yes or no answers. The researcher tries to get people to share their thoughts on a topic—without giving them many directions or guidelines about what to say.

A researcher might ask different consumers, "What do you think about when you decide where to shop for food?" One person may talk about convenient location, another about service, and others about the quality of the fresh produce. The real advantage of this approach is *depth*. Each person can be asked follow-up questions so the researcher really understands what *that* respondent is thinking. The depth of the qualitative approach gets at the details—even if the researcher needs a lot of judgment to summarize it all.

Some types of qualitative research don't use specific questions. For example, a consumer might simply be shown a product or an ad and be asked to comment.

Focus groups stimulate discussion

The most widely used form of qualitative questioning in marketing research is the **focus group interview,** which involves interviewing 6 to 10 people in an informal group setting. The focus group also uses open-ended questions, but here the interviewer wants to get group interaction—to stimulate thinking and get immediate reactions.

A skilled focus group leader can learn a lot from this approach. A typical session may last an hour, so participants can cover a lot of ground. Sessions are often videotaped (or broadcast over the Internet or by satellite) so different managers can form their own impressions of what happened. Some research firms create electronic focus groups in which participants log onto a specified website and with others participate in a chat session; each person types in comments that are shared on the computer screen of each of the other participants. What they type is the record of the session.[11]

Regardless of how a focus group is conducted, conclusions reached from a session usually vary depending on who watches it. A typical problem—and serious limitation—with qualitative research is that it's hard to measure the results objectively. The results seem to depend so much on the viewpoint of the researcher. In addition, people willing to participate in a focus group—especially those who talk the most—may not be representative of the broader target market.

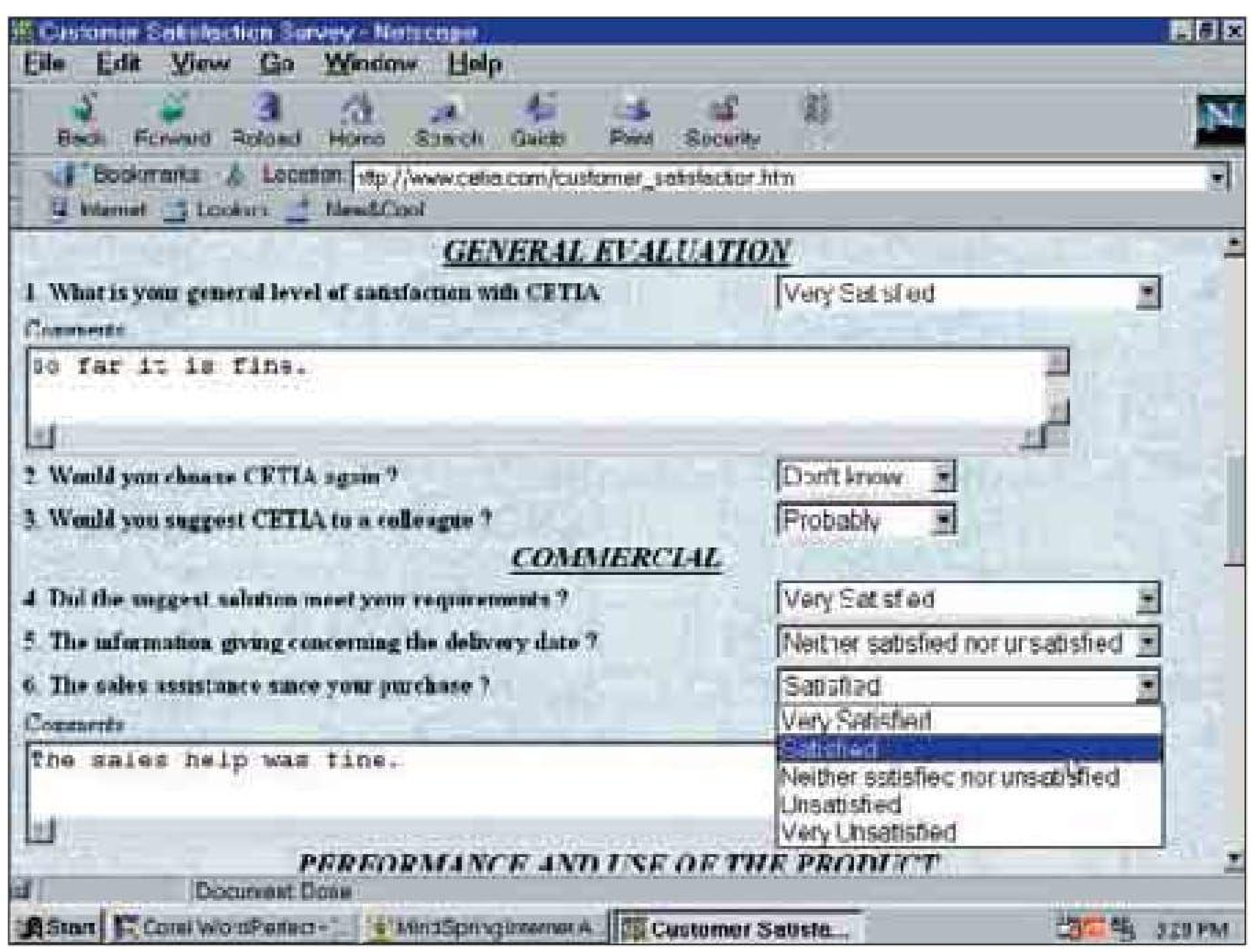
Focus groups can be conducted quickly and at relatively low cost—an average of about $3,500 each. This is part of their appeal. But focus groups are probably being overused. It's easy to fall into the trap of treating an idea arising from a focus group as a "fact" that applies to a broad target market. For example, it's trendy for food product firms in Japan to do focus groups with teenage girls. The logic is that girls will be brutally honest about what they think and that they are good at predicting what will be a hit. So based on a girl's comments in a focus group, Meiji Milk Products substituted oolong tea for fruit juice in a new drink it was developing. The suggested change might or might not be a good one. But there's no way to know if one girl's point of view is representative.[12]

To avoid this trap, some researchers use qualitative research to prepare for quantitative research. For example, the Jacksonville Symphony Orchestra wanted to broaden its base of support and increase ticket sales. It hired a marketing research firm to conduct focus group interviews. These interviews helped the marketing managers refine their ideas about what these target "customers" liked and did not like about the orchestra. The ideas were then tested with a larger, more representative sample. Interviewers telephoned 500 people and asked them how interested they would be in various orchestra programs, event locations, and guest artists. Then they planned their promotion and the orchestra's program for the year based on the research. Ticket sales nearly doubled.[13]

As this example suggests, qualitative research can provide good ideas—hypotheses. But we need other approaches—perhaps based on more representative samples and objective measures—to *test* the hypotheses.

Structured questioning gives more objective results

When researchers use identical questions and response alternatives, they can summarize the information quantitatively. Samples can be larger and more representative, and various statistics can be used to draw conclusions. For these reasons, most survey research is **quantitative research**—which seeks structured responses that can be summarized in numbers, like percentages, averages, or other statistics. For example, a marketing researcher might calculate what percentage of respondents have tried a new product and then figure an average score for how satisfied they were.



CETIA is a European manufacturer of minicomputers. When it delivers a product, it asks the customer to complete this interactive customer satisfaction survey, which is located at CETIA's Internet website. The survey uses a combination of fixed response questions and open-ended comments.

Fixed responses speed answering and analysis

Survey questionnaires usually provide fixed responses to questions to simplify analysis of the replies. This multiple-choice approach also makes it easier and faster for respondents to reply. Simple fill-in-a-number questions are also widely used in quantitative research. Fixed responses are also more convenient for computer analysis, which is how most surveys are analyzed.

Quantitative measures of attitudes too

One common approach to measuring consumers' attitudes and opinions is to have respondents indicate how much they agree or disagree with a questionnaire statement. A researcher interested in what target consumers think about frozen pizzas, for example, might include a statement like "I add extra topppings when I prepare frozen pizza." The respondent might check off a response such as (1) strongly disagree, (2) disagree, (3) agree, or (4) strongly agree.

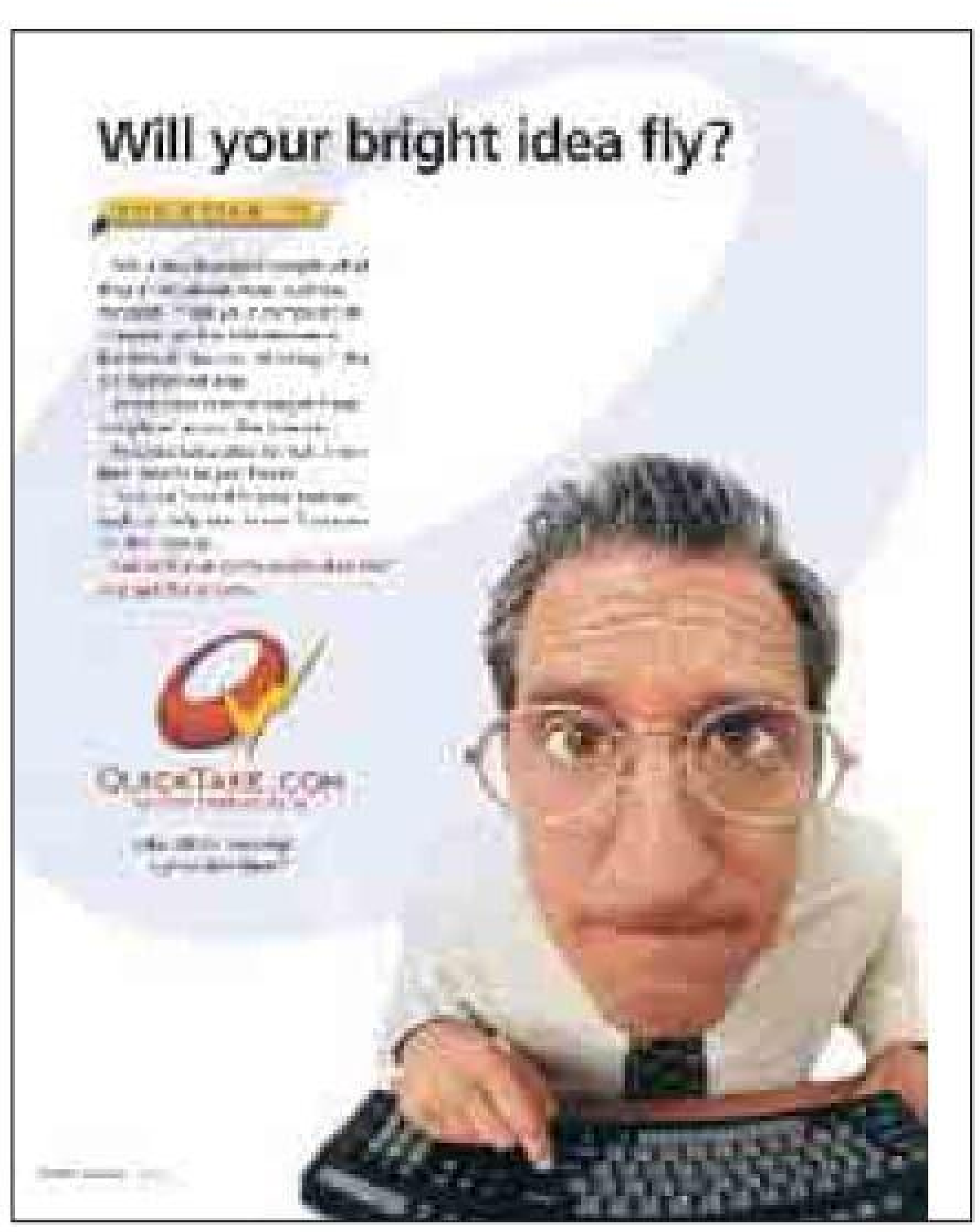
Another approach is to have respondents *rate* a product, feature, or store. For example, a questionnaire might ask consumers to rate the taste of a pizza as *excellent, good, fair,* or *poor.*

Surveys come in many forms

Decisions about what specific questions to ask and how to ask them are usually related to how respondents will be contacted—by mail (or electronic mail), via a website, on the phone, or in person. What question and response approach is used may also affect the survey. There are many possibilities. For example, whether the survey is self-administered or handled by an interviewer, the questionnaire may be on paper or in an interactive computer format (perhaps distributed on a CD or disk or displayed on a website). The computer can be programmed to skip certain questions, depending on answers given. Computerized questionnaires also allow the research to show pictures or play audio/video clips (for example, to get reactions to an advertising jingle). In an automated telephone interview, questions may be prerecorded on an audio tape or computer and the subject responds by pushing touch-tone buttons on the phone.

Mail and online surveys are common and convenient

A questionnaire distributed by mail, e-mail, or online is useful when extensive questioning is necessary. Respondents can complete the questions at their convenience. They may be more willing to provide personal information—since a



Online surveys provide fast feedback and often at a lower cost than the old-fashioned way. Of course, as always, the manager needs to be certain that the sample used is representative.

questionnaire can be completed anonymously. But the questions must be simple and easy to follow since no interviewer is there to help. If the respondent is likely to be a computer user, it may be possible to send the questionnaire on a disk (or put it on a website) and include a help feature with additional directions for people who need them.

A big problem with questionnaires is that many people don't complete them. The **response rate**—the percentage of people contacted who complete the questionnaire—is often low and respondents may not be representative. There is particular concern about the representativeness of people who complete computer-based or online questionnaires. The response rates tend to be even lower than by mail. In addition, online respondents may be younger, better educated, or different in other ways that impact how they answer. Mail, e-mail, and online surveys are economical if a large number of people respond. But they may be quite expensive if the response rate is low. The cost of the research may be wasted if the respondents are not representative; worse, the results may be misleading.

Distributing questionnaires by e-mail, or at a website, is rapidly growing in popularity. The main reason is that it is almost instantaneous—and the responses come back in computer form. Surveys sent by regular mail usually take a lot longer; pencil-and-paper responses also need to be computerized. In business markets, the time to deliver questionnaires can sometimes be reduced by faxing them.

Regardless of how quickly a questionnaire is distributed, people may take a long time to respond. For example, with a mail survey, it often takes a month or more to get the data back, which is too slow for some decisions. Moreover, it is difficult to get respondents to expand on particular points. In markets where illiteracy is a problem, it may not be possible to get any response. In spite of these limitations, the convenience and economy of self-administered surveys makes them popular for collecting primary data.

Internet

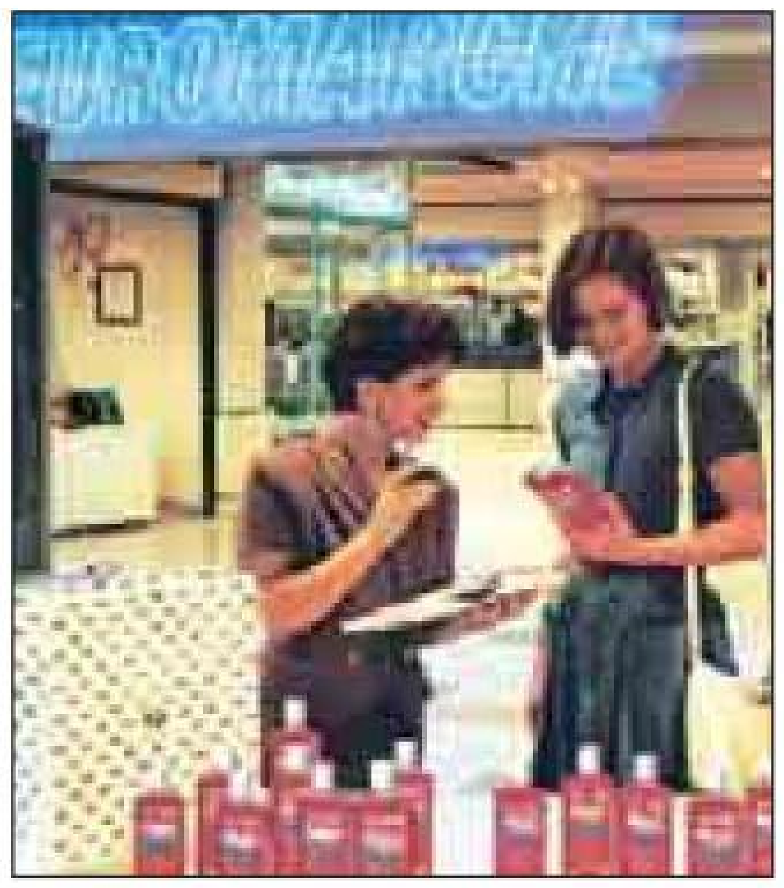
Internet Exercise Perseus Development Corporation sells software that allows a user to create online questionnaires that can be distributed by e-mail or used on the Internet. To see samples of online questions, go to the Perseus website (www.perseus.com) and then click on *Sample Surveys*. Do you think that it's more convenient for a consumer to complete a survey online or with pencil and paper?

Telephone surveys—fast and effective

Telephone interviews are popular. They are effective for getting quick answers to simple questions. Telephone interviews allow the interviewer to probe and really learn what the respondent is thinking. In addition, with computer-aided telephone interviewing, answers are immediately recorded on a computer, resulting in fast data analysis. On the other hand, some consumers find calls intrusive—and about a third refuse to answer any questions. Moreover, the telephone is usually not a very good contact method if the interviewer is trying to get confidential personal information—such as details of family income. Respondents are not certain who is calling or how such personal information might be used.

Personal interview surveys—can be in-depth

A personal interview survey is usually much more expensive per interview than e-mail, mail, or telephone surveys. But it's easier to get and keep the respondent's attention when the interviewer is right there. The interviewer can also help explain complicated directions and perhaps get better responses. For these reasons, personal interviews are commonly used for research on business customers. To reduce the



cost of locating consumer respondents, interviews are sometimes done at a store or shopping mall. This is called a mall intercept interview because the interviewer stops a shopper and asks for responses to the survey.

Researchers have to be careful that having an interviewer involved doesn't affect the respondent's answers. Sometimes people won't give an answer they consider embarrassing. Or they may try to impress or please the interviewer. Further, in some cultures people don't want to give any information. For example, many people in Africa, Latin America, and Eastern Europe are reluctant to be interviewed. This is also a problem in many low-income, inner-city areas in the United States; even Census Bureau interviewers have trouble getting cooperation.[14]

Sometimes questioning has limitations. Then observing may be more accurate or economical.

Observing—what you see is what you get

Observing—as a method of collecting data—focuses on a well-defined problem. Here we are not talking about the casual observations that may stimulate ideas in the early steps of a research project. With the observation method, researchers try to see or record what the subject does naturally. They don't want the observing to *influence* the subject's behavior.

A museum director wanted to know which of the many exhibits was most popular. A survey didn't help. Visitors seemed to want to please the interviewer and usually said that all of the exhibits were interesting. Putting observers near exhibits—to record how long visitors spent at each one—didn't help either. The curious visitors stood around to see what the observer was recording, and that messed up the measures. Finally, the museum floors were waxed to a glossy shine. Several weeks later, the floors around the exhibits were inspected. It was easy to tell which exhibits were most popular—based on how much wax had worn off the floor!

In some situations, consumers are recorded on videotape. Later, researchers can study the tape by running the film at very slow speed or actually analyzing each frame. Researchers use this technique to study the routes consumers follow through a grocery store or how they select products in a department store. Similarly, firms that have online shopping services on the Internet can use software to "watch" how consumers use the website, how much time they spend at each display, and the like.

Similarly, many franchise companies use the observation method—to check how well a franchisee is performing. KFC hires people to go to different KFC stores and act like normal customers. Then these "secret shoppers" report back to KFC on how they were treated, the quality of the service and food, and the cleanliness of the store.

Observing is common in advertising research

Observation methods are common in advertising research. For example, Nielsen Media Research (www.nielsenmedia.com) uses a device called the "people meter" that adapts the observation method to television audience research. This machine is attached to the TV set in the homes of selected families. It records when the set is on and what station is tuned in.

Checkout scanners see a lot

Computerized scanners at retail checkout counters, a major breakthrough in observing, help researchers collect very specific, and useful, information. Often this type of data feeds directly into a firm's MIS. Managers of a large chain of stores can

Whirlpool Heats Up Sales with Marketing Research

Marketing managers at Whirlpool want to satisfy customers. So they do a lot of research to find out how satisfied customers really are. For example, Whirlpool participates in a survey that results in the American Satisfaction Index. This survey of 50,000 consumers allows Whirlpool to benchmark what customers think about its quality with ratings for other firms, including competitors. The ratings published in 2000, for example, put Whirlpool among the top companies studied, and its rating was up 2 points from the year before. But the research doesn't stop there. Each year Whirlpool sends an appliance satisfaction survey to 180,000 households. Respondents rate all of their appliances on dozens of dimensions. When a competing product scores higher, Whirlpool engineers take it apart to see why and build the best ideas into their new models. However, they don't just wait for competitors to figure things out first.

A recently introduced oven, now one of Whirlpool's hottest sellers, illustrates their approach. A survey showed that consumers wanted an oven with easy-to-clean controls. That didn't seem consistent with previous sales patterns; the firm's MIS showed that models with knobs consistently outsold models with easier-to-clean push buttons. Rather than disregard the survey, Whirlpool designed a range with touch pad controls by listening to consumers at every step along the way. Consumers who played with computer simulations of the touch pad explained what they liked and didn't like. Videotapes of consumers who tried prototype models in mall intercept interviews provided ideas to further refine the design. The result is a touch pad control that is easy to clean and so easy to use that consumers don't even need to read the manual.

Consumer research has been an even more important factor in Whirlpool's growth overseas. For example, until recently only about one-third of European households had a microwave oven. Whirlpool researchers learned that more people would buy a microwave oven if it could crisp food as it heated the food. Whirlpool designed a microwave with a broiler coil and other innovations. The result is an oven that is popular in Britain for frying bacon and eggs and in Italy for crisping pizza crusts.[15]

www.mhhe.com/fourps

see exactly what products have sold each day and how much money each department in each store has earned. But the scanner also has wider applications for marketing research.

Information Resources, Inc. (www.infores.com), and ACNielsen (acnielsen.com) use **consumer panels**—a group of consumers who provide information on a continuing basis. Whenever a panel member shops for groceries, he or she gives an ID number to the clerk, who keys in the number. Then the scanner records every purchase—including brands, sizes, prices, and any coupons used. In a variation of this approach, consumers use a hand-held scanner to record purchases once they get home. For a fee, clients can evaluate actual customer purchase patterns and answer

Data from electronic scanners helps retailers decide what brands they will sell and helps their suppliers plan so that products arrive at the store in time to prevent stock-outs.

Simmons' ad agency used an experiment to improve a new print ad for the Beautyrest mattress. Groups of consumers saw two different ads. The ads were the same, except that one featured a father holding a baby and the other featured a mother. The ad with the father earned higher recall scores.

questions about the effectiveness of their discount coupons. Did the coupons draw new customers, or did current customers simply use them to stock up? If consumers switched from another brand, did they go back to their old brand the next time? The answers to such questions are important in planning marketing strategies—and scanners can help marketing managers get the answers.

Some members of the consumer panel are also tied into a special TV cable system. With this system, a company can direct advertisements to some houses and not others. Then researchers can evaluate the effect of the ads by comparing the purchases of consumers who saw the ads with those who didn't.

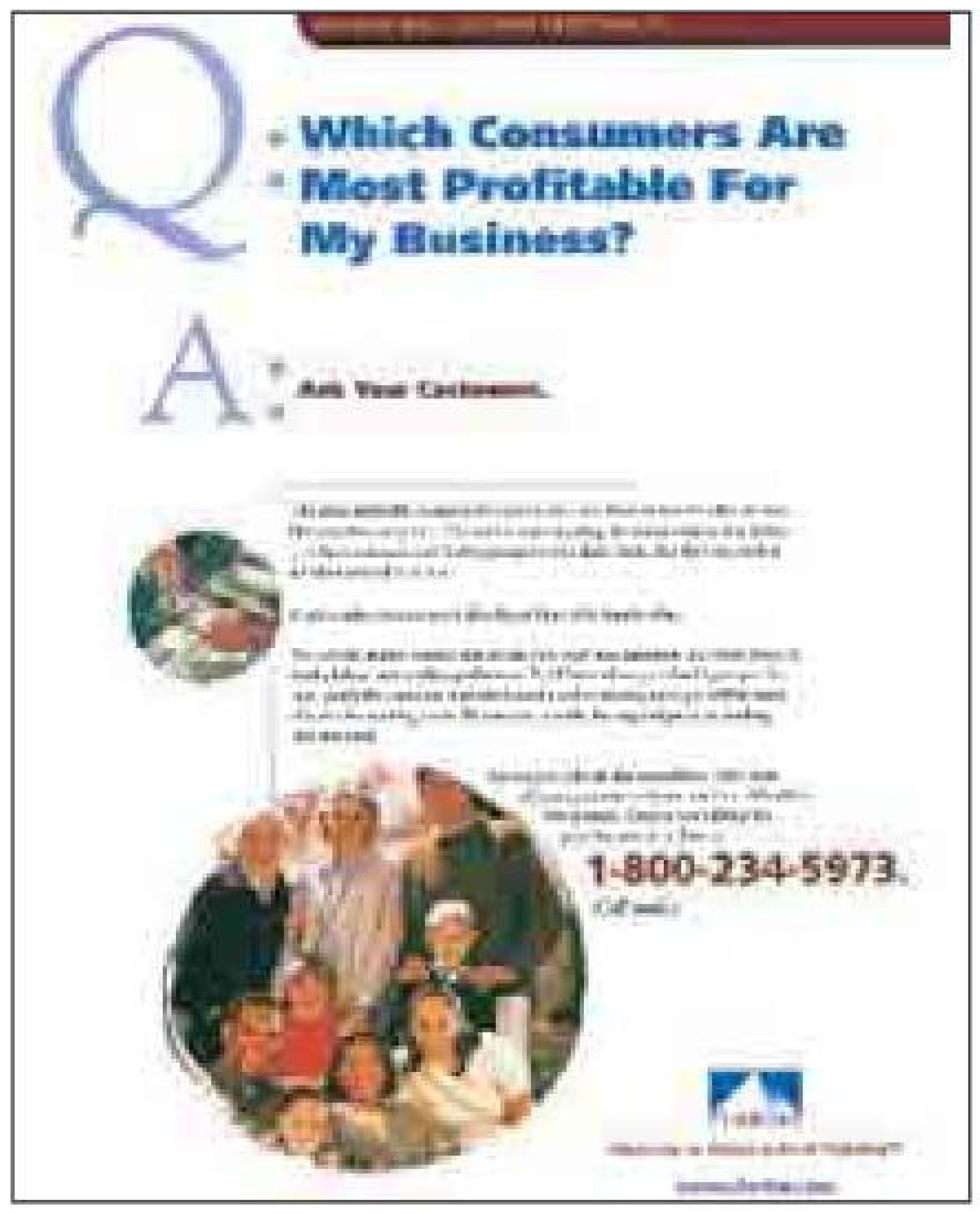
The use of scanners to "observe" what customers actually do is changing consumer research methods. Companies can turn to firms like Information Resources as a *single source* of complete information about customers' attitudes, shopping behavior, and media habits.

Data captured by electronic scanners is equally important to e-commerce in business-to-business markets. Increasingly, firms mark their shipping cartons and packages with computer-readable bar codes that make it fast and easy to track inventory, shipments, orders, and the like. As information about product sales or shipments becomes available, it is instantly included in the MIS and accessible over the Internet. That way, a manager can access any detailed piece of information or do an analysis to summarize trends and patterns. Here, as with scanner data on consumers, the information available is so detailed that the possibilities are limited more by imagination—and money—than by technology.[16]

Experimental method controls conditions

A marketing manager can get a different kind of information—with either questioning or observing—using the experimental method. With the **experimental method,** researchers compare the responses of two (or more) groups that are similar except on the characteristic being tested. Researchers want to learn if the specific characteristic—which varies among groups—*causes* differences in some response among the groups. For example, a researcher might be interested in comparing responses of consumers who had seen an ad for a new product with consumers who had not seen the ad. The "response" might be an observed behavior—like the

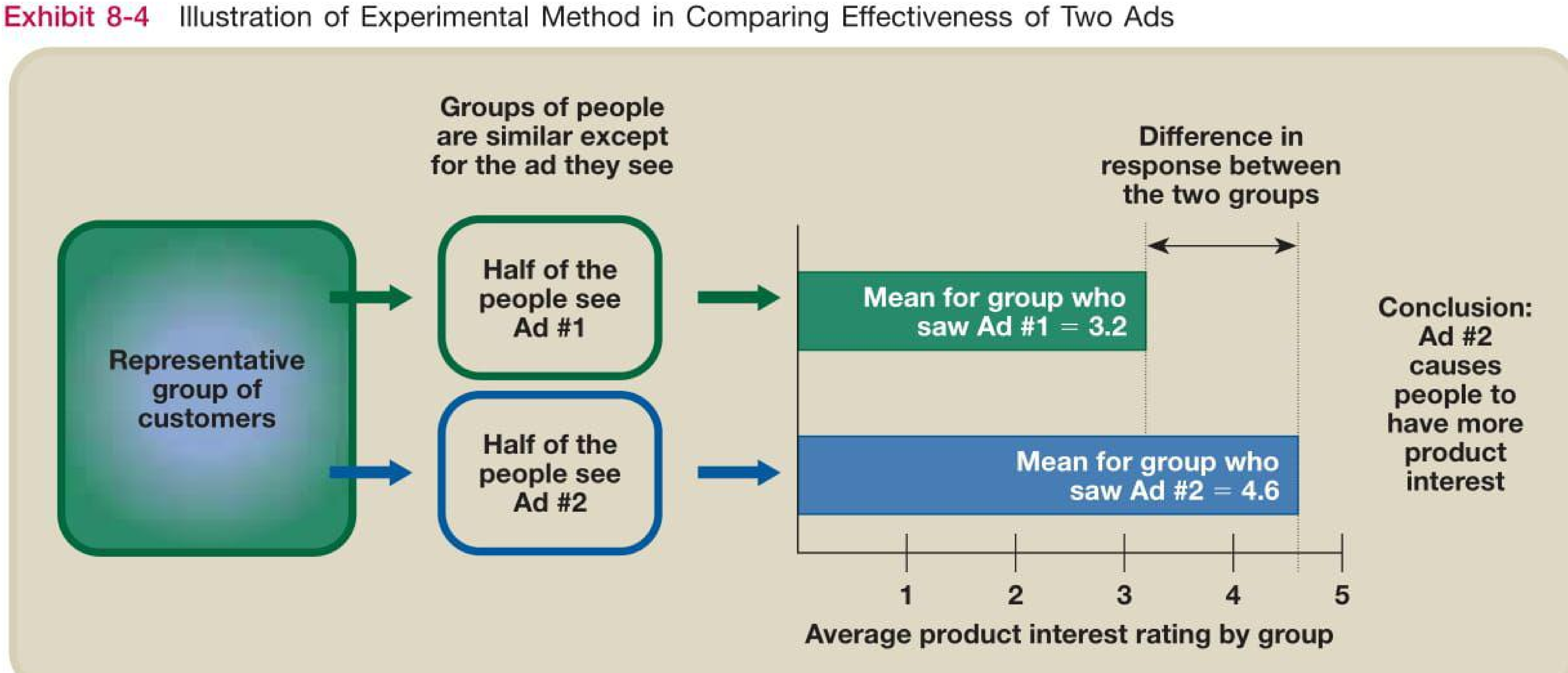
A firm's own data on customers' past purchases, if properly analyzed, can be an important source of information for evaluating new opportunities.

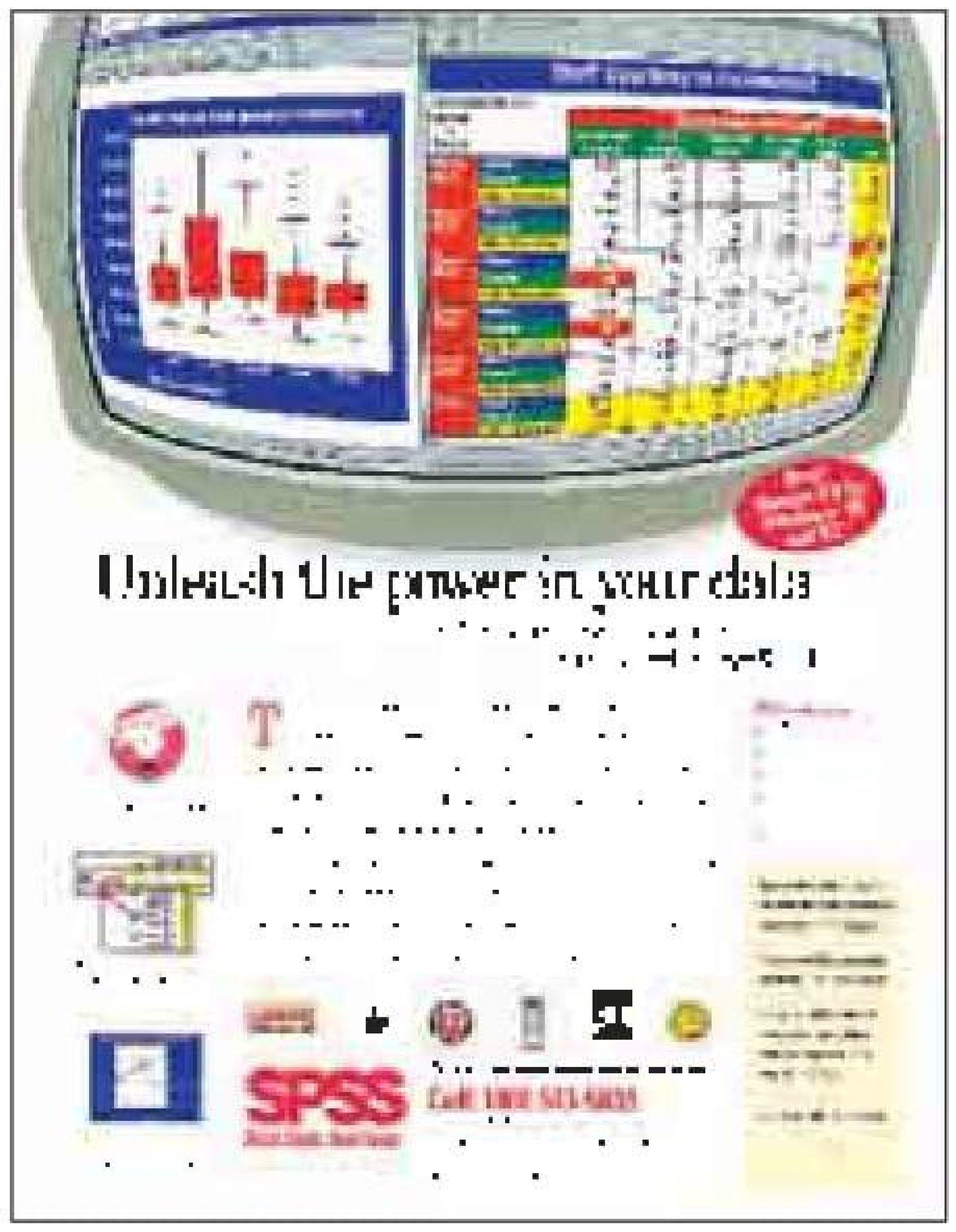


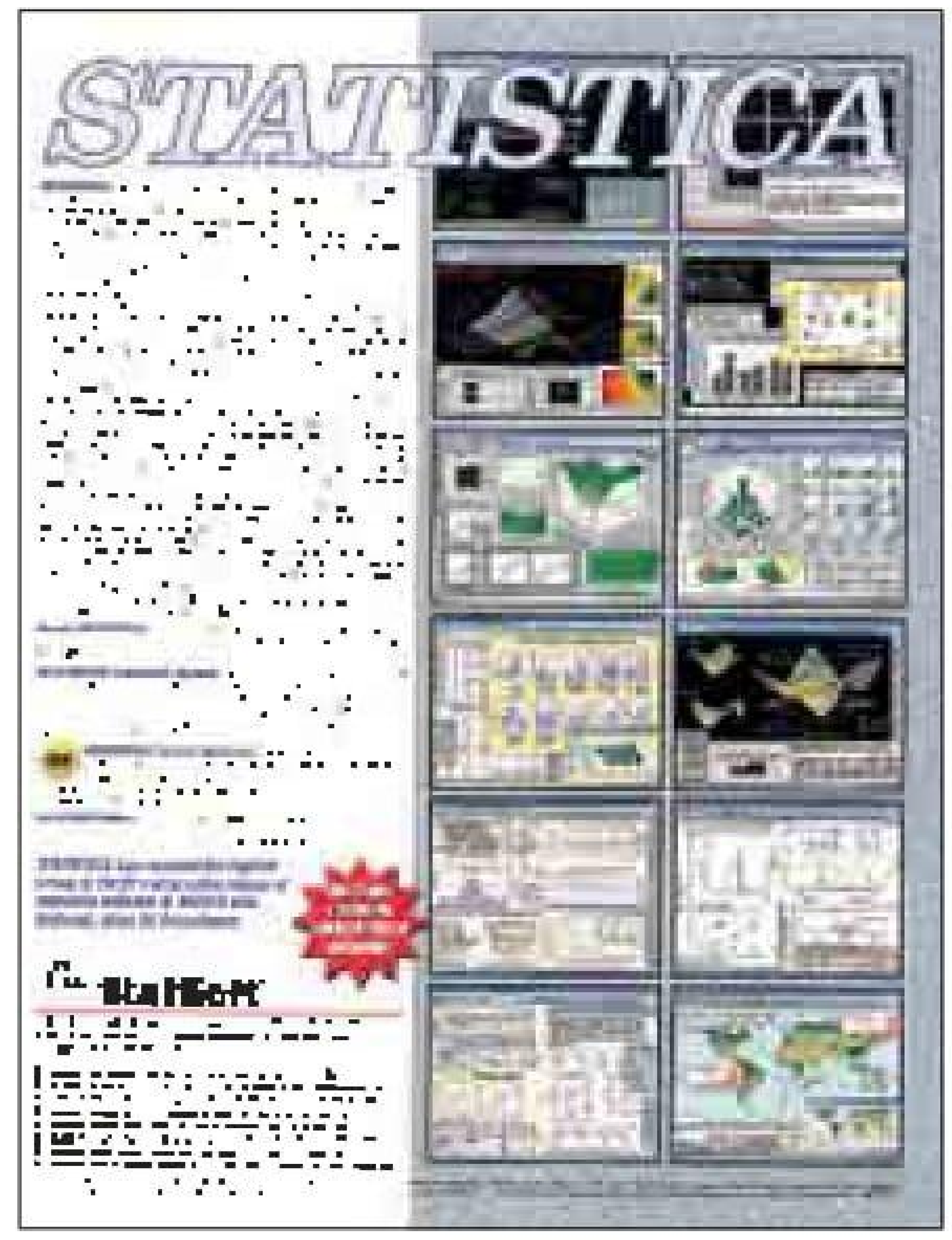
purchase of a product—or the answer to a specific question—like "How interested are you in this new product?" See Exhibit 8-4.

Marketing managers for Mars—the company that makes Snickers candy bars—used the experimental method to help solve a problem. They wanted to know if making their candy bar bigger would increase sales enough to offset the higher cost. To decide, they conducted a marketing experiment in which the company carefully varied the size of candy bars sold in *different* markets. Otherwise, the marketing mix stayed the same. Then researchers tracked sales in each market area to see the effect of the different sizes. They saw a big difference immediately: The added sales more than offset the cost of a bigger candy bar.

Exhibit 8-4 Illustration of Experimental Method in Comparing Effectiveness of Two Ads







SPSS and StatSoft are statistical packages that make it easy to summarize and graph marketing research data.

Test-marketing of new products is another type of marketing experiment. In a typical approach, a company tries variations on its planned marketing mix in a few geographic market areas. The results of the tests help to identify problems or refine the marketing mix—before the decision is made to go to broader distribution. However, alert competitors may disrupt such tests—perhaps by increasing promotion or offering retailers extra discounts. To avoid these problems, some small firms conduct some of their tests in foreign markets.

Researchers don't use the experimental method as often as surveys and focus groups. Many managers don't understand the valuable information they can get from this method. Further, they don't like the idea of some researcher "experimenting" with their business.[17]

Syndicated research shares data collection costs

Some private research firms specialize in collecting data and supplying it to managers in many different client firms. Often the marketing manager subscribes to the research service and gets regular updates.

Marketing managers from many different firms may have to make the same kinds of decisions and may need the same type of data. The most economical approach in a situation like this is for one specialist firm to collect the data and distribute it to the different users, who share the cost. This is how Information Resources, Inc., and ACNielsen operate.

Many other firms collect and distribute specialized types of data. For example, Market Facts (www.marketfacts.com) sells access to its surveys on home appliances and electronics, retail banking and insurance, and other product categories. Simmons Market Research Bureau (www.smrb.com) does extensive research on consumer media habits and then sells its data to many advertising agencies and producers of consumer products who want to find out about their particular target markets. Many different auto producers use J. D. Power's (www.jdpa.com) surveys of customer satisfaction—often as the basis for advertising claims. Subscription data services are available for numerous different industries—ranging from food service to prescription drugs to micro electronic devices.[18]

Interpreting the Data—Step 4

What does it really mean?

After someone collects the data, it has to be analyzed to decide what it all means. In quantitative research, this step usually involves statistics. **Statistical packages**—easy-to-use computer programs that analyze data—have made this step easier. As we noted earlier, some firms provide *decision support systems* so managers can use a statistical package to interpret data themselves. More often, however, technical specialists are involved at the interpretation step.

Cross-tabulation is one of the most frequently used approaches for analyzing and interpreting marketing research data. It shows the relationship of answers to two different questions. Exhibit 8-5 is an example. The cross-tab analysis showed that customers who had moved in the last year were much more likely than nonmovers to have adopted "Caller ID" on their phones at home.

There are many other approaches for statistical analysis—the best one depends on the situation. The details of statistical analysis are beyond the scope of this book. But a good manager should know enough to understand what a research project can and can't do.[19]

Is your sample really representative?

It's usually impossible for marketing managers to collect all the information they want about everyone in a **population**—the total group they are interested in. Marketing researchers typically study only a **sample,** a part of the relevant population. How well a sample *represents* the total population affects the results. Results from a sample that is not representative may not give a true picture.

The manager of a retail store might want a phone survey to learn what consumers think about the store's hours. If interviewers make all of the calls during the day, the sample will not be representative. Consumers who work outside the home during the day won't have an equal chance of being included. Those interviewed might say the limited store hours are "satisfactory." Yet it would be a mistake to assume that *all* consumers are satisfied.

Random samples tend to be representative

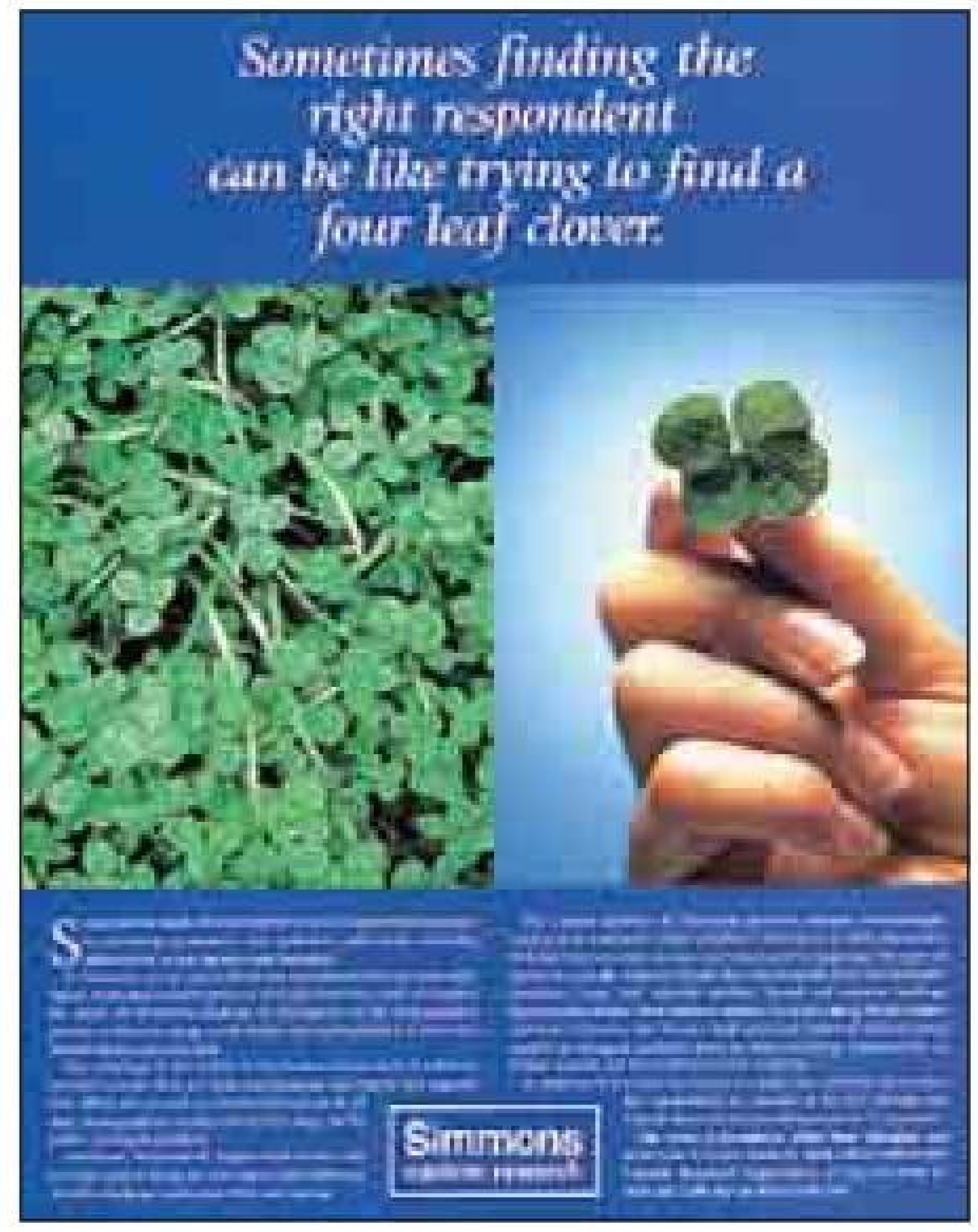
You can see that getting a representative sample is very important. One method of doing so is **random sampling,** where each member of the population has the same chance of being included in the sample. Great care must be used to ensure that sampling is really random, not just haphazard.

If a random sample is chosen from a population, it will tend to have the same characteristics and be representative of the population. "Tend to" is important because it is only a tendency—the sample is not exactly the same as the population.

Exhibit 8-5 Cross-Tabulation Breakdown of Responses to a Phone Company Consumer Survey

		Have You Moved in the Last Year?		
	Answers:	No	Yes	Total
Do you have "Caller ID" on your phone at home?	*Yes*	10.2%	23.4%	15.5%
	No	89.8	76.6	84.5
	Total	100.0%	100.0%	100.0%

Interpretation: 15.5 percent of people in the survey said that they had "Caller ID" on their phone at home. However, the percentage was much higher (23.4%) among people who had moved in the last year, and lower (10.2%) among people who had not moved.



Survey Sampling, Inc., and Simmons Custom Research help marketing researchers develop samples that are really representative of the target market.

Much marketing research is based on nonrandom sampling because of the high cost and difficulty of obtaining a truly random sample. Sometimes nonrandom samples give very good results—especially in industrial markets where the number of customers may be relatively small and fairly similar. But results from nonrandom samples must be interpreted, and used, with care.

Research results are not exact

An estimate from a sample, even a representative one, usually varies somewhat from the true value for a total population. Managers sometimes forget this. They assume that survey results are exact. Instead, when interpreting sample estimates, managers should think of them as *suggesting* the approximate value.

If random selection is used to develop the sample, researchers can use various methods to help determine the likely accuracy of the sample value. This is done in terms of **confidence intervals**—the range on either side of an estimate that is likely to contain the true value for the whole population. Some managers are surprised to learn how wide that range can be.

Consider a wholesaler who has 1,000 retail customers and wants to learn how many of these retailers carry a product from a competing supplier. If the wholesaler randomly samples 100 retailers and 20 say yes, then the sample estimate is 20 percent. But with that information the wholesaler can only be 95 percent confident that the percentage of all retailers is in the confidence interval between 12 and 28 percent.[20]

The larger the sample size, the greater the accuracy of estimates from a random sample. With a larger sample, a few unusual responses are less likely to make a big difference.

Validity problems can destroy research

Even if the sampling is carefully planned, it is also important to evaluate the quality of the research data itself.

Managers and researchers should be sure that research data really measures what it is supposed to measure. Many of the variables marketing managers are interested in are difficult to measure accurately. Questionnaires may let us assign numbers to consumer responses, but that still doesn't mean that the result is precise. An interviewer might ask "How much did you spend on soft drinks last week?" A respondent may be perfectly willing to cooperate—and be part of the representative sample—but just not be able to remember.

Validity concerns the extent to which data measures what it is intended to measure. Validity problems are important in marketing research because many people will try to answer even when they don't know what they're talking about. Further, a poorly worded question can mean different things to different people and invalidate the results. Often, one or more pretests of a research project are required to evaluate the quality of the questions and measures and to ensure that potential problems have been identified. Managers must be sure that they only pay for research results that are representative and valid.

Poor interpretation can destroy research

Besides sampling and validity problems, a marketing manager must consider whether the analysis of the data supports the *conclusions* drawn in the interpretation step. Sometimes technical specialists pick the right statistical procedure—their calculations are exact—but they misinterpret the data because they don't understand the management problem. In one survey, car buyers were asked to rank five cars in order from "most preferred" to "least preferred." One car was ranked first by slightly more respondents than any other car so the researcher reported it as the "most liked car." That interpretation, however, ignored the fact that 70 percent of the respondents ranked the car *last*!

Interpretation problems like this can be subtle but crucial. Some people draw misleading conclusions on purpose to get the results they want. Marketing managers must decide whether *all* of the results support the interpretation and are relevant to their problem.

Marketing manager and researcher should work together

Marketing research involves many technical details. But you can see that the marketing researcher and the marketing manager must work together to be sure that they really do solve the problem facing the firm. If the whole research process has been a joint effort, then the interpretation step can move quickly to decision making—and solving the problem.

Solving the Problem—Step 5

The last step is solving the problem

In the problem solution step, managers use the research results to make marketing decisions.

Some researchers, and some managers, are fascinated by the interesting tidbits of information that come from the research process. They are excited if the research reveals something they didn't know before. But if research doesn't have action implications, it has little value and suggests poor planning by the researcher and the manager.

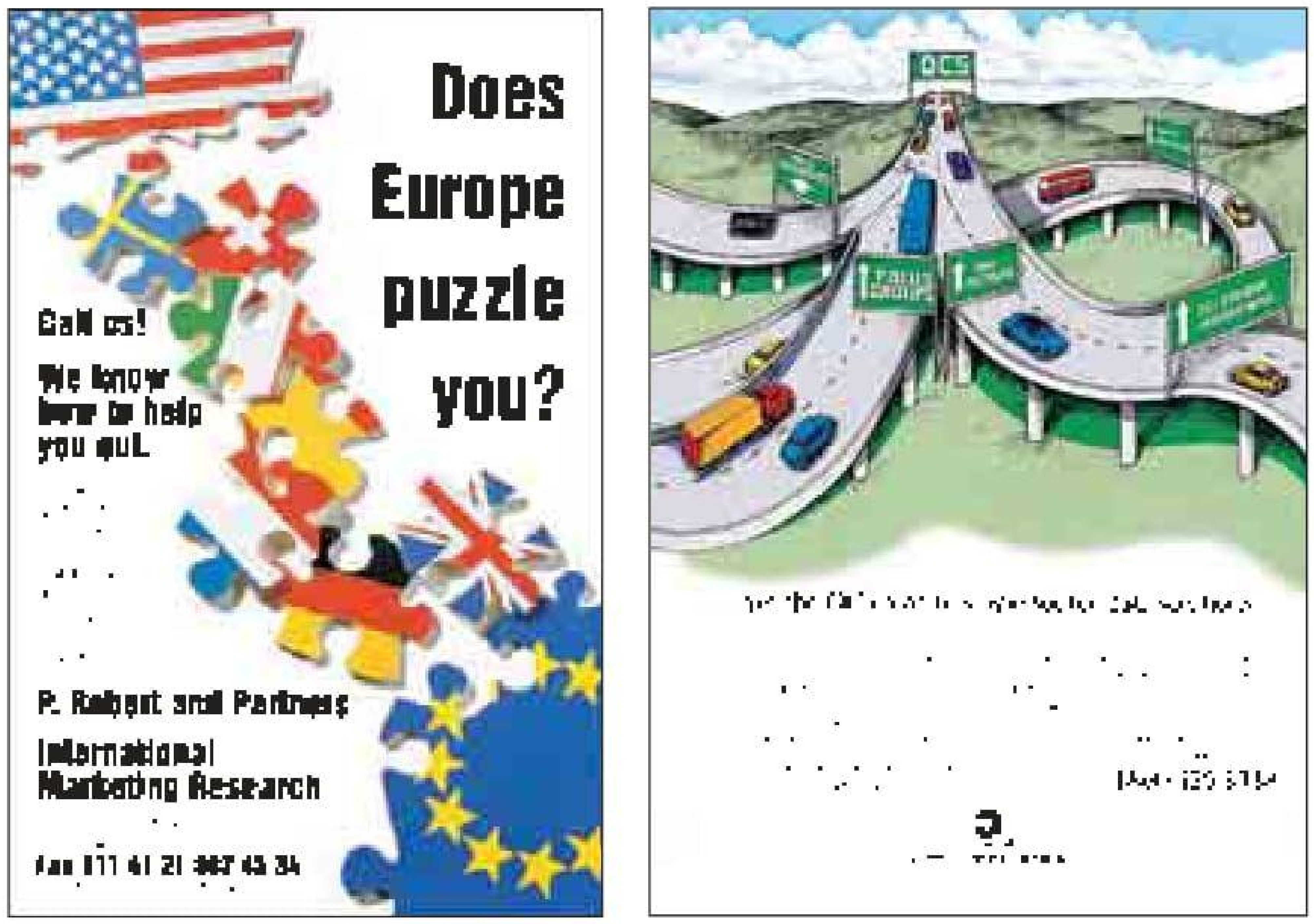
When the research process is finished, the marketing manager should be able to apply the findings in marketing strategy planning—the choice of a target market or the mix of the four Ps. If the research doesn't provide information to help guide these decisions, the company has wasted research time and money.

We emphasize this step because it is the reason for and logical conclusion to the whole research process. This final step must be anticipated at each of the earlier steps.

International Marketing Research

Research contributes to international success

Marketing research on overseas markets is often a major contributor toward international marketing success. Conversely, export failures are often due to a lack of home office management expertise concerning customer interests, needs, and other



There are a large number of international marketing research firms that offer specialized services to marketing managers.

segmenting dimensions as well as environmental factors such as competitors' prices and products. Effective marketing research can help to overcome these problems.

Avoid mistakes with local researchers

Whether a firm is small and entering overseas markets for the first time or already large and well established internationally, there are often advantages to working with local market research firms. These research suppliers know the local situation and are less likely to make mistakes based on misunderstanding the customs, language, or circumstances of the customers they study.

Many large research firms have a network of local offices around the world to help with such efforts. Similarly, multinational or local advertising agencies and middlemen can often provide leads on identifying the best research suppliers.

Some coordination and standardization makes sense

When a firm is doing similar research projects in different markets around the world, it makes sense for the marketing manager to coordinate the efforts. If the manager doesn't establish some basic guidelines at the outset, the different research projects may all vary so much that the results can't be compared from one market area to another. Such comparisons give a home office manager a better chance of understanding how the markets are similar and how they differ.

Multinational companies with operations in various countries often attempt to centralize some market research functions. One reason is to reduce costs or achieve research economies of scale. The centralized approach also improves the firm's ability to transfer experience and know-how from one market area or project to another. For example, one of Eastman Kodak's International Divisions appointed a market research specialist in each subsidiary company throughout the Asian region. The specialists report to local marketing managers but also receive research direction from expert research managers in the head office in the U.S.

There is even greater opportunity and need to standardize and coordinate elements of a marketing information system in an international marketing operation. Computer databases and information systems are most useful when they are designed to include the same variables organized consistently over time. Without this, it is impossible for the manager to go into much depth in comparing and contrasting data from different markets.[21]

How Much Information Do You Need?

Information is costly—but reduces risk

We have been talking about the benefits of good marketing information, but dependable information can be expensive. A big company may spend millions developing an information system. A large-scale survey can cost from $20,000 to $100,000—or even more. The continuing research available from companies such as Information Resources, Inc., can cost a company well over $100,000 a year. And a market test for 6 to 12 months may cost $200,000 to $500,000 per test market!

Companies that are willing and able to pay the cost often find that marketing information pays for itself. They are more likely to select the right target market and marketing mix—or they might see a potential problem before it becomes a costly crisis.

What is the value of information?

The high cost of good information must be balanced against its probable value to management. Managers never get all the information they would like to have. Very detailed surveys or experiments may be "too good" or "too expensive" or "too late" if all the company needs is a rough sampling of retailer attitudes toward a new pricing plan by tomorrow. Money is wasted if research shows that a manager's guesses are wrong and the manager ignores the facts.

Marketing managers must take risks because of incomplete information. That's part of their job and always will be. But they must weigh the cost of getting more data against its likely value. If the risk is not too great, the cost of getting more information may be greater than the potential loss from a poor decision. A decision to expand into a new territory with the present marketing mix, for example, might be made with more confidence after a $25,000 survey. But just sending a sales rep into the territory for a few weeks to try to sell potential customers would be a lot cheaper. And, if successful, the answer is in and so are some sales.[22]

Conclusion

Marketing managers face difficult decisions in selecting target markets and managing marketing mixes. And managers rarely have all the information they would like to have. This problem is usually worse for managers who work with international markets. But they don't have to rely only on intuition. They can usually obtain good information to improve the quality of their decisions.

Computers and computer networks, like the Internet, are helping marketing managers become full-fledged members of the information age. Both large and small firms are setting up intranets and marketing information systems (MIS)—to be certain that routinely needed data is available and accessible quickly.

Marketing managers deal with rapidly changing environments. Available data is not always adequate to answer the detailed questions that arise. Then a marketing research project may be required to gather new information.

Marketing research should be guided by the scientific method. The scientific approach to solving marketing problems involves five steps: defining the problem, analyzing the situation, obtaining data, interpreting data, and solving the problem. This objective and organized approach helps to keep research on target—reducing the risk of doing costly research that isn't necessary or doesn't solve the problem.

Our strategy planning framework can be helpful in finding the real problem. By finding and focusing on the real problem, the researcher and marketing manager may be able to move quickly to a useful solution—without the cost and risks of gathering primary data in a formal research project. With imagination, they may even be able to find the answers in their MIS or in other readily available secondary data.

Questions and Problems

1. Discuss the concept of a marketing information system and why it is important for marketing managers to be involved in planning the system.
2. In your own words, explain why a decision support system (DSS) can add to the value of a marketing information system. Give an example of how a decision support system might help.
3. If a firm's intranet and marketing decision support system do not include a search engine, would they still be useful to a marketing manager? Why?
4. Discuss how output from a marketing information system (MIS) might differ from the output of a typical marketing research department.
5. Discuss some of the likely problems facing the marketing manager in a small firm that has just purchased a personal computer with a cable modem to search the Internet for information on competitors' marketing plans.
6. Explain the key characteristics of the scientific method and show why these are important to managers concerned with research.
7. How is the situation analysis different from the data collection step? Can both these steps be done at the same time to obtain answers sooner? Is this wise?
8. Distinguish between primary data and secondary data and illustrate your answer.
9. With so much secondary information now available free or at low cost over the Internet, why would a firm ever want to spend the money to do primary research?
10. If a firm were interested in estimating the distribution of income in the state of California, how could it proceed? Be specific.
11. If a firm were interested in estimating sand and clay production in Georgia, how could it proceed? Be specific.
12. Go to the library (or get on the Internet) and find (in some government publication or website) three marketing-oriented "facts" on international markets that you did not know existed or were available. Record on one page and show sources.
13. Explain why a company might want to do focus group interviews rather than individual interviews with the same people.
14. Distinguish between qualitative and quantitative approaches to research—and give some of the key advantages and limitations of each approach.
15. Define response rate and discuss why a marketing manager might be concerned about the response rate achieved in a particular survey. Give an example.
16. Prepare a table that summarizes some of the key advantages and limitations of mail, e-mail, telephone, and personal interview approaches for administering questionnaires.
17. Would a firm want to subscribe to a shared cost data service if the same data were going to be available to competitors? Discuss your reasoning.
18. Explain how you might use different types of research (focus groups, observation, survey, and experiment) to forecast market reaction to a new kind of disposable baby diaper, which is to receive no promotion other than what the retailer will give it. Further, assume that the new diaper's name will not be associated with other known products. The product will be offered at competitive prices.
19. Marketing research involves expense—sometimes considerable expense. Why does the text recommend the use of marketing research even though a highly experienced marketing executive is available?
20. A marketing manager is considering opportunities to export her firm's current consumer products to several different countries. She is interested in getting secondary data that will help her narrow down choices to countries that offer the best potential. The manager then plans to do more detailed primary research with consumers in those markets. What suggestions would you give her about how to proceed?
21. Discuss the concept that some information may be too expensive to obtain in relation to its value. Illustrate.

Suggested Cases

8. Sophia's Ristorante
9. SleepyTime Motel

Computer-Aided Problem

8. **Marketing Research**

Texmac, Inc., has an idea for a new type of weaving machine that could replace the machines now used by many textile manufacturers. Texmac has done a telephone survey to estimate how many of the old-style machines are now in use. Respondents using the present machines were also asked if they would buy the improved machine at a price of $10,000.

Texmac researchers identified a population of about 5,000 textile factories as potential customers. A sample of these were surveyed, and Texmac received 500 responses. Researchers think the total potential market is about 10 times larger than the sample of respondents. Two hundred twenty of the respondents indicated that their firms used old machines like the one the new machine was intended to replace. Forty percent of those firms said that they would be interested in buying the new Texmac machine.

Texmac thinks the sample respondents are representative of the total population, but the marketing manager realizes that estimates based on a sample may not be exact when applied to the whole population. He wants to see how sampling error would affect profit estimates. Data for this problem appears in the spreadsheet. Quantity estimates for the whole market are computed from the sample estimates. These quantity estimates are used in computing likely sales, costs, and profit contribution.

a. *An article in a trade magazine reports that there are about 5,200 textile factories that use the old-style machine. If the total market is really 5,200 customers—not 5,000 as Texmac originally thought—how does that affect the total quantity estimate and profit contribution?*
b. *Some of the people who responded to the survey didn't know much about different types of machines. If the actual number of old machines in the market is really 200 per 500 firms—not 220 as estimated from survey responses—how much would this affect the expected profit contribution (for 5,200 factories)?*
c. *The marketing manager knows that the percentage of textile factories that would actually buy the new machine might be different from the 40 percent who said they would in the survey. He estimates that the proportion that will replace the old machine might be as low as 36 and as high as 44 percent—depending on business conditions. Use the analysis feature to prepare a table that shows how expected quantity and profit contribution change when the sample percent varies between a minimum of 36 and a maximum of 44 percent. What does this analysis suggest about the use of estimates from marketing research samples? (Note: Use 5,200 for the number of potential customers and use 220 as the estimate of the number of old machines in the sample.)*

For additional questions related to this problem, see Exercise 8-3 in the *Learning Aid for Use with Basic Marketing*, 14th edition.