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Marketing Intelligence

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This reading contains links to online interactive illustrations and video, denoted by the icons above. To access these exercises, you will need a broadband internet connection. Verify that your browser meets the minimum technical requirements by visiting <http://hbsp.harvard.edu/tech-specs>.

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1 INTRODUCTION

Marketing decisions come in all shapes and sizes. Actions can be strategic or tactical and relate to different elements of the marketing program—from a new product launch to a price change. Some decisions work out, others don't. In the history of marketing, probably no marketing decision has been as widely discussed and criticized as Coca-Cola Company's launch of New Coke on April 23, 1985, replacing the original Coca-Cola, with its classic taste and a history going back to 1886.

The New Coke decision was not made without market research. The campaign that PepsiCo built around the "Pepsi Challenge," with its taste tests beating out Coca-Cola, had sparked the development of a new formulation to beat Pepsi on taste. Coca-Cola had conducted numerous taste tests pitting Coca-Cola and New Coke against Pepsi. When New Coke was launched and the original Coca-Cola withdrawn from the market, the outcry from consumers was immediate—and unprecedented. It grew to a point that by July 11, 1985, the company announced that classic Coca-Cola was back. Company president Donald Keough stated, "The simple fact is that all the time and money and skill poured into consumer research could not measure or reveal the deep and abiding emotional attachment to original Coca-Cola by so many people . . ."¹ Coca-Cola had researched its consumers, but it had failed to develop true intelligence about them and consequently made a dramatic product error. Coca-Cola hoped that winning in a taste test would lead to market success. It was wrong. It did the market research, but it failed to enhance its marketing intelligence.

Proper market intelligence replaces "marketing by hoping" with "marketing by knowing." Obtaining appropriate insights into customers' behavior and having general market intelligence is critical to marketing success. In July 2019, retailer Forever 21 included a free gift with online orders to enhance the customer relationship. The free gift? An Atkins Diet Bar. But Forever 21 failed to have the consumer intelligence to gauge the reaction of customers, particularly those who had ordered "plus size" clothing. Social media quickly disseminated the messages of outrage. Forever 21 quickly apologized, explained that the bar had been sent to all buyers, not just plus size buyers, and dropped the program.² Having appropriate insights into customers' behavior and general market intelligence is critical to marketing success.

Since its 1948 start, Porsche has been known for high-performance sports cars. However, its in-depth consumer intelligence work allowed it to see the potential for a Porsche sports utility vehicle (SUV). The Porsche Cayenne became

Porsche's best-selling vehicle: Porsche sold twice as many Cayenne vehicles in 2015 as its original Porsche 911. It followed the Cayenne with a successful customer intelligence-driven entry into the "family-minded," four-door luxury sedan market: the Panamera.³

Market intelligence should be at the root of all marketing decisions—from the strategic, such as which segments of the market to address, to the more tactical, such as advertising copy points, logo, or website design elements.^a

Recent changes in technology, particularly in relation to the internet and social media, have revolutionized both the types of questions asked and the ways those questions are investigated. For example, only relatively recently would a company like Diesel, the Italian clothing company, face a problem such as learning that its presence on Pinterest needed boosting.⁴ The digital era has made online market intelligence-gathering a matter of course, and companies use a range of tools on the Internet to do everything from basic research to customer surveys for brand positioning.

Whether a company does its own research or pays a marketing research company to gather intelligence, the types of research best suited to a particular question vary. InSites Consulting has a well-developed philosophy on effective market research that is captured in its "10 Commandments of Contemporary Market Research." We consider the last of these commandments a good summary of our philosophy on marketing intelligence:

Contemporary market researchers need DJ [disc jockey] skills. . . . They need to have the ability to choose the right methods and data sources and throw them in the right mix. Last but not least, they need to perform well in the boardroom by playing the most relevant tunes to management.⁵

This reading provides the basic knowledge that a marketing manager needs to be able to use those researcher "DJ" skills to full advantage—by setting out the full portfolio of "songs" that can be played (i.e., techniques that can be used) and offering insights about when they will be most useful. Furthermore, in this reading we demonstrate how effective decision-making hinges on marketing intelligence, which we define as a deep and informed understanding of the relationship between the customer, the marketing environment, and the company's offerings.

^a See *Core Reading: Framework for Marketing Strategy Formation* (HBP No. 8153) for a full discussion of the variety of marketing decisions to be made.

In the Essential Reading that follows, we begin by discussing a very successful market intelligence program. We then generalize to an effective research process and a taxonomy of research methods. This leads to discussion and practical examples of each intelligence-gathering technique. We then discuss how the procedures can be leveraged and combined into an effective overall marketing intelligence program, particularly with insight into customer behavior.

2 ESSENTIAL READING

Marketing intelligence can help marketers make a variety of decisions, and perhaps the most important decision is what a company aspires to be in the marketplace. This is the customer “value proposition” that the company hopes to bring to market, the special quality that will differentiate the company from competitors. With a desired product positioning in mind, the company can turn to decisions on the optimal action plan—the marketing mix of the four Ps—*product, promotion, place* (i.e., distribution, or how the firm goes to market), and *price*—to deliver that value proposition to the company’s chosen customers. (For more information, see *Core Reading: Framework for Marketing Strategy Formation* [HBP No. 8153].)

Consider, for example, the intelligence program implemented in 2012 by newly appointed brand managers for Planters Nuts.⁶ While Planters and Mr. Peanut, the iconic brand “spokesperson,” were well known, sales of Planters Peanuts were lagging as consumers moved to options they considered healthier and more “modern,” such as almonds and pistachios. Planters faced the following issues: (1) Who should be the target market and what should Planters mean to them? and (2) What supporting marketing mix could help Planters reverse its declining sales trend?

The Planters team started with an analysis of the situation using data at hand. Planters, along with most consumer packaged goods (CPG) firms, purchased data from Nielsen on market size, market shares of all brands, average pricing on retail shelves, and extent of distribution in stores. Publicly available data sources provided Planters with knowledge of the advertising spending by major competitors, Wonderful Pistachios and Blue Diamond Almonds. Blue Diamond had also posted a presentation from an almond industry conference setting out its target markets (e.g., primary market: US women, age 35 or more). Blue Diamond’s ad theme was “Get Your Good Going” and its packaging featured a “heart healthy check mark.” The US Department of Agriculture and US Department of Health and Human Services conducted publicly funded research

and published the nutrient content of peanuts, almonds, and pistachios. These data showed that peanuts were, in fact, just as nutritious as almonds and had fewer calories.

Planters conducted regular, quarterly “brand health” consumer surveys and thus had its own data on hand about, first, which nuts consumers were aware of and which were top of mind and, second, the consumer perceptions of Planters’ quality and uniqueness. The team complemented these data with newly gathered information. A large-scale quantitative survey with a sample of 2,000 people measured consumers’ perceptions of almonds, pistachios, and peanuts on several dimensions, such as:

- Healthy/nutritious
- Low in fat
- Inexpensive

Although the research showed that there was no health difference, consumer perceptions favored almonds and pistachios.

To develop deeper qualitative insight into consumers, the team conducted in-depth interviews: a 60-minute in-home conversation with a consumer followed by a trip to the store where the consumer could set out how they shopped for nuts. Finally, the team gathered customers (typically a group of six) who were past but not current Planters consumers. These customers were asked to bring a bag of their current favorite nuts with them to the session, where a moderator led the group through a discussion of nuts, Planters, and competitors. This produced quotes about Planters ranging from “the best name in nuts” to “Planters makes me think of the 1950s.”

This collection of data provided the intelligence Planters needed to develop a new positioning for Planters peanuts. As described below, Planters combined four different types of data:

- Free on-hand or “secondary” data, for example, data on nutrition published by the US Department of Agriculture.
- Paid-for secondary data, for example, the market share and store data purchased from Nielsen.
- Newly collected or “primary” data of a quantitative nature, for example, consumers’ perceptions of nutrition value measured by agreement with statements such as “peanuts are nutritious” and “almonds are nutritious.”
- “Primary” data of a qualitative nature, for example, the in-depth 60-minute conversations about nuts that Planters conducted in person in consumers’ homes.

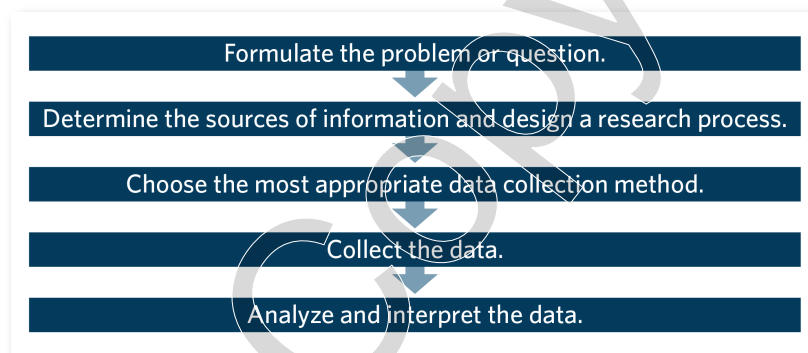
Note also that Planters’ research focused on a variety of actors in the market. Primarily it directed its research to understand *consumers*, but it also sought to

understand the strategy and specific actions of *competitors*. It also studied the behavior of *collaborators* such as retailers, analyzing the shelf space they granted to the various brands.

2.1 The Research Process and Research Techniques

The process for market research generally follows the five-step model in **Exhibit 1**. As shown in the exhibit, the company should first specify the question to be answered (Why are sales declining in Brazil?) or decision to be made (Should we offer a new, lower-priced item to reach price-sensitive customers?). By clearly stating this all-important initial problem or decision, marketers can then begin collecting and interpreting useful data.

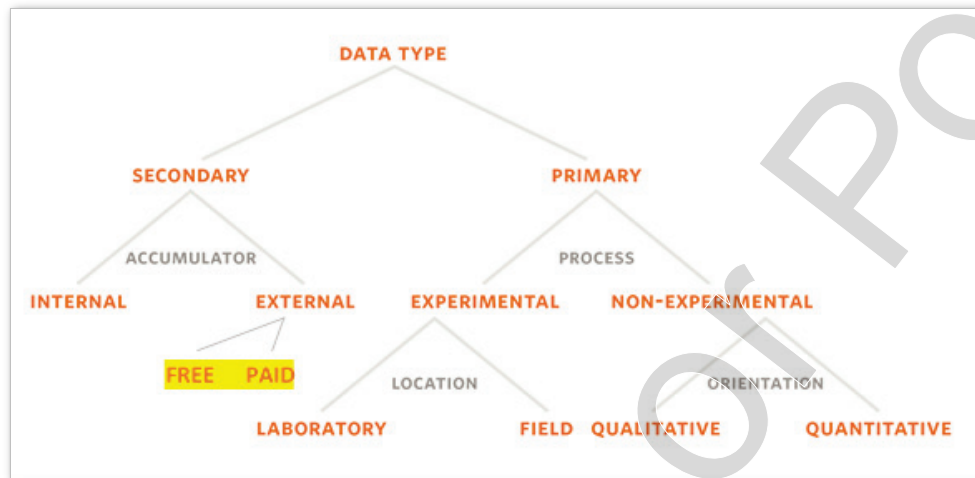
EXHIBIT 1 The Market Research Process



Source: Adapted and reprinted from Harvard Business School, "Note on Market and Consumer Research," HBS No. 579-136, by Scott Ward and Dave Reibstein. Copyright © 1979 by the President and Fellows of Harvard College; all rights reserved.

The second and third steps of the research process are to make decisions about, respectively, the types of data needed and the collection methods to be used. **Exhibit 2** presents a general taxonomy of research methods and the full set of data types. Applying this to Planters, the only approach not used is the "experimental" branch, where research is conducted using test and control groups.

EXHIBIT 2 Overview of Research Data and Methods



Note: "Accumulator" refers to whether the data were collected from sources internal or external to the company; "process" refers to the methodological procedures by which new insights (i.e., primary data) were collected.

Source: Adapted from Harvard Business School, "Market Research," HBS No. 592-034, by Robert J. Dolan. Copyright © 1991 by the President and Fellows of Harvard College; all rights reserved.

The fourth step of marketing research shown in Exhibit 1 is to collect the data, and the fifth and final step is to analyze and interpret the data before presenting them persuasively in a way that, in the words of InSites Consulting's tenth commandment, "performs well in the boardroom."⁷ This last point is key because the presentation of the data analysis influences how it will be implemented. For example, research conducted by Procter & Gamble's (P&G's) Swiffer marketing team produced a recommended action plan that ran counter to the company's standard global strategy. The Swiffer team's plan nevertheless prevailed because of how it was presented. In **Video 1**, Robyn Bolton (Founder and Chief Navigator, Mile Zero) explains how the type of research conducted (team members in the field speaking with potential customers) generated credibility for the team with top management and acceptance of the team's recommendations.



VIDEO 1 Conduct Firsthand Market Research



Scan this QR code, click the icon, or use the link to access the video: bit.ly/hbsp2utt4b0.

We now turn to a discussion of the research techniques set out in Exhibit 2.

2.2 Research Methods

In the overview of research data and methods in Exhibit 2, we start with the type of data: primary or secondary. Because secondary data is often quicker and cheaper for marketers to access than primary research, the common practice is to explore secondary data first and assess its potential to enhance marketing intelligence.

2.2.1 Secondary Data

The source of secondary data can be the company itself (“internal” in Exhibit 2) or another party (“external”). As we saw in the Planters example, an external party may be accumulating data as part of a public process and making them available at no cost (e.g., the US Census Bureau), or the data could be proprietary, meaning that they are for sale (e.g., Nielsen could provide comparisons of the firm’s and all competitive firms’ distribution levels, prices, and market shares by geographic region).

Because any *internal secondary data* that exist will be readily available at no cost, marketers should begin their collection process with these data. Sources include company accounting records (probably the most intensively used source), which provide data such as cost of goods sold; unit sales by product, region, or customer; and expenditures by time period. Sales call records are another rich vein of internal data because they contain information on a customer’s expressed wants and level of satisfaction with the company’s offering, account penetration and potential, and competitive activity at the account. A good practice is to collect data systematically from employees about important market developments, such as information they gleaned at a trade show or conference.

Many firms, like Planters, accumulate customer data regularly over time so that they are available to help assess the state of the business and sometimes to develop new action plans. For example, as part of management of its power tools business, Black & Decker did an annual image survey, measuring potential customers’ knowledge and attitudes toward Black & Decker and its competitors’ power-tool brands. It collected data about buyers’ awareness of its brand and perceptions of the Black & Decker tool as “one of the best,” “high quality,” “desirable,” and one that a person would be “proud to own.” Thus, at a time when market share results proved unsatisfactory, these data were on hand, providing quick insight into the cause of the market share problem.⁸

Marketers should also consult publicly available *external secondary data*, which can provide important background in marketing decision-making. For

example, in the United States, the Bureau of Labor Statistics, the Department of Commerce, and the Department of Energy provide information on topics such as gross domestic product (GDP), unemployment levels, consumer spending, household debt-to-income levels, patent applications, and the number of firms operating in the country in any particular industry. Such data were key for HubSpot, the leading software company involved in the “inbound” marketing space. When HubSpot needed to decide which type of customer it should target, it turned to secondary public data for basic numbers such as how many small- to medium-size companies existed, measured by number of employees.⁹ Understanding the size of different market segments helped HubSpot decide which size companies to pursue, which in turn had implications for all aspects of its marketing plan (e.g., pricing and promotion).

Many useful trade association reports and academic papers are also publicly available. Press releases, annual and 10-K financial reports, and online job listings by competitors can also yield important insights. For example, a competitor of P&G may find it useful to know that e-commerce sales grew to represent 7% of P&G’s business in 2018, as it stated in its Annual Report. For assessing markets outside the United States, marketers will find useful general country information, at no cost, in *The World Factbook* of the US Central Intelligence Agency (CIA) and the Economist Intelligence Unit.

Market researchers can also tap into other external sources of information that are proprietary and generally require a subscription or fee to access. Syndicated services rely on the fact that there are economies of scale in collecting data for a large number of companies. For example, virtually every CPG brand team wants to know its own and its competitors’ distribution level, average price, market share, and frequency with which the company’s products are featured in stores (such as an end-of-aisle display). Having one firm, such as Nielsen, work with retailers to accumulate all that data and then sell them to interested parties makes economic sense. For example, when L’Oréal wanted information on its Plénitude brand, which was sold in 25,000 US grocery and drugstores, it contracted with Nielsen to provide data on prices to the trade (i.e., prices that intermediaries, such as drugstores, pay for the product), everyday average retail price paid, and market share.¹⁰

Passport, Euromonitor International’s global market research database, provides data on a wide variety of consumer products around the world—for example, information about market sizes, company shares, brand shares, and distribution level.¹¹ It also provides a vast array of data on countries and consumers and, as a proprietary data source, offers subscriptions to industry reports. Some of the categories covered include: beer (Eastern Europe), apparel and footwear (global), and ice cream (Americas). Its consumer reports by

country include topics such as Consumer Trends and Lifestyles (Americas) and Population and Homes (Western Europe).

How do Euromonitor and other syndicated services gather their data? They contract leading firms to work on a customized basis to provide these data. They also undertake their own studies that they sell to firms. For example, Forrester, another well-known research firm, conducts annual surveys of more than 675,000 consumers and business leaders worldwide.¹²

For data on competitors, sources such as Bloomberg and Hoovers provide detailed company information. Searching the Internet can also yield specific information on many topics—some at no cost and some for a fee. For example, GoodCarBadCar provides monthly sales data for most car models. It accumulates most of this data from automobile manufacturer reports. The data are made available for free, and GoodCarBadCar generates revenue by selling ads on its site. J. D. Power collects extensive “Voice of the Customer” data and makes a portion of the data available for free. It also has 800 professional analysts worldwide to work with the data and provide insights to paying clients.

An important development in marketing intelligence is the emergence of technically sophisticated methods for tracking social media. Just as Nielsen tracks changes and developments in supermarkets (products displayed, prices, products receiving special emphasis), these research suppliers monitor and track developments on social media sites. Social media “conversations” can be an important source of market intelligence because the consumers who visit these sites are not normally in research mode; rather, they are interacting freely with community members.

Consider the capabilities of Sysomos, one of the most highly regarded companies in the data-supplying arena, whose clients include Coca-Cola, H&M, Adidas, and Hyundai.¹³ Sysomos has a database of “billions of social media conversations” dating back 13 months from blogs, forums, websites, Twitter, YouTube, Facebook, and Instagram. Marketers can tap into the database to obtain information on product or company mentions and automated favorability rankings (the percentage of mentions of a company and its competitors that are favorable, neutral, or unfavorable). Geodemographic filters permit sorting of comments from only certain customer types (e.g., millennials in New York City or senior citizens in Florida). Many useful tools are offered in this area for businesses small and large. Some of the tools are available free of charge, such as the social media management solutions from Hootsuite. It offers a limited, entry-level product suitable for individual use at no cost, as well as a more sophisticated, subscription-based version for businesses and professionals.¹⁴

When collecting secondary data from any external source, marketers should assess the accuracy and relevance of such data, particularly if it is relatively expensive. Many research providers have good reputations; nevertheless, before purchasing, one should understand the research methodology thoroughly, when the data were collected, and how the data have been analyzed and reported. Typically, a research supplier provides a description of its methods and scope of data collection.

We now turn to primary data.

2.2.2 Collecting Primary Data

Secondary data may suffice for the marketing decision at hand. For example, the tactical action question, “Should the company advertise on television show A or B?” may be answered appropriately with viewer data purchased from Nielsen Media Research. Often, however, an appropriately informed decision requires the collection of new data, or “primary” data, as indicated in Exhibit 2. For example, as Eli Lilly prepared to launch its erectile dysfunction drug, Cialis, it knew the incidence of the condition from secondary data obtained from the National Institutes of Health. But to assess the importance of specific product attributes to prescribers (a key to deciding the drug’s value proposition), it had to conduct its own survey of potential prescribers.¹⁵

As shown in Exhibit 2, the two types of primary data are experimental and nonexperimental. In **experimental research**, the researcher manipulates the environment, exposing some people to condition A (for example, a coupon offering \$15 off a purchase of \$100 or more) and others to condition B (a coupon offering \$20 off a purchase of \$100 or more). The researcher then observes the results, such as sales across the two groups. In nonexperimental data collection methods, the firm does not disrupt normal business activity; it seeks data only by observing or interacting with market participants. We now cover each type in turn.

Experimental Research

Experiments can serve many marketing purposes. For example, in 2017, Aura Bioscience was developing a new drug for the treatment of eye cancer.¹⁶ Experiments on dosing levels compared patient outcomes. For any drug, the US Food and Drug Administration (FDA) requires extensive experimental data to show safety and efficacy before market introduction. Its experimental data were required to gain authorization to market the drug.

Experiments differ from other research approaches in that the researcher manipulates the environment in some way (e.g., by offering a coupon) and sets

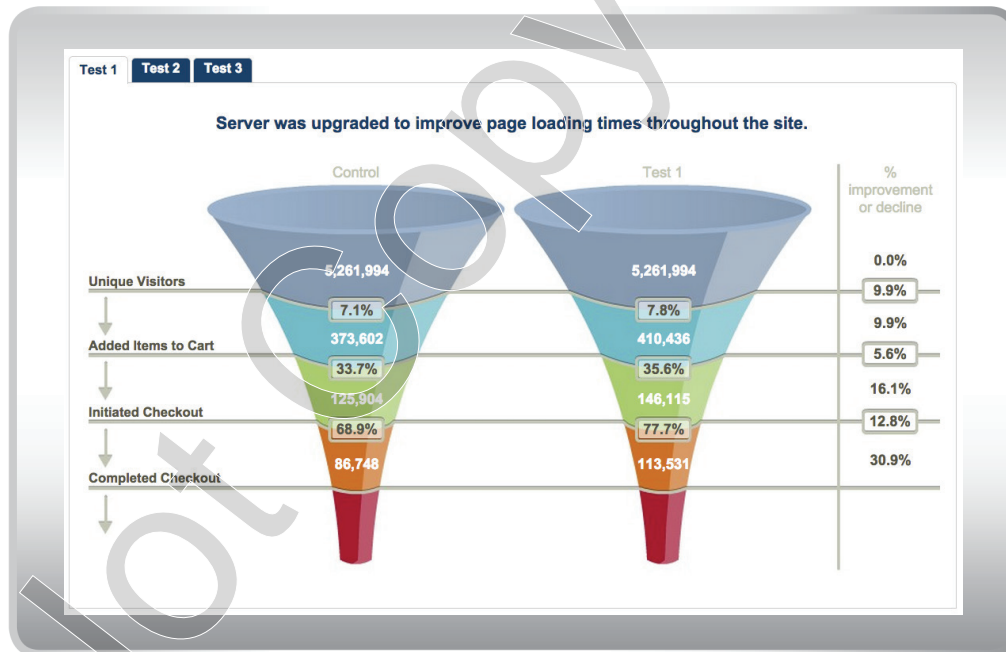
up an experimental design to compare results across test and control groups. This method is popularly known as *A/B testing*: **treatment A** is applied to one group and treatment B is applied to another. Experiments can serve a variety of purposes. For example, **Interactive Illustration 1** shows how an e-commerce company used three successive A/B tests to evaluate potential improvements to its website and operations. The number listed in each horizontal band represents the number of customers who completed that part of the purchase process. The percentages in the boxes on the right-hand side show the percentage difference in control versus test customers who proceeded to the next step at that exact point in the process (noncumulative). The numbers that appear without boxes around them show the percentage of total increase in customers cumulatively at that point in the process.



INTERACTIVE ILLUSTRATION 1 A/B Testing with Conversion Funnels



Scan this QR code, click the image, or use the link to access the interactive illustration: bit.ly/hbspFae34F03.



Source: Reprinted from *Core Reading in Entrepreneurship: Experimenting in the Entrepreneurial Venture*, HBP No. 8077, by Thomas R. Eisenmann, Eric Ries, and Sarah Dillard. Copyright © 2014 by the Harvard Business Publishing Corporation; all rights reserved.

As you examine each test's results, notice how the modification described affected the treatment group's conversion funnel in the rightmost column. If you were the marketing manager of this website, which modification would you implement permanently? What other modifications to the website or operations would you test next?

In the age of social media, consumers are increasingly playing an active role not just in consuming the product (as in traditional funnel models) but also in co-creating value. New models, such as HubSpot's flywheel framework, have emerged to address this trend. Such models do not end with the customer consuming the product; rather, the consumption is itself an input to acquisition of new customers—a virtuous cycle (when all goes well).

Experiments can take place in both the online and brick-and-mortar worlds. For example, a retailer may give a product an end-of-aisle display in one set of stores and not in another set. Technological advances have increased the precision of experiments. For example, Catalina Marketing, the personalized digital media company, has a relationship with most US grocery stores capturing purchase data tagged by loyal card numbers. At checkout, Catalina is able to distribute cents-off coupons to customers based on their previous purchase behavior. For example, a soft drink marketer may identify a group of interest as customers who once bought the brand but have not purchased it in the past six months. The control group would not receive a coupon, while the test group would receive a "\$1.00 off six-pack" coupon valid for the next month. Catalina's precision in measuring the impact of these price discounts has led almost every large CPG firm to become a client.

Online purchasing has also greatly accelerated the use of marketing experiments. A/B testing is easy to implement, and purchase impacts can be measured precisely. For example, Basecamp sold software to enable team collaboration.¹⁷ Basecamp employed a "freemium" model with a product of low functionality offered for free and then a product line of three paid products of increasing functionality at prices of \$29, \$79, and \$250 per month. Getting the four product definitions right and the best prices for the three paid tiers was no easy task, and Basecamp executives admitted launching the product line "with our best guess at appropriate pricing based on our past experience instincts and precedents."¹⁸ But eager to do better, Basecamp turned to A/B testing. With a focus on the impact on the lifetime value of the customer, Basecamp implemented a series of carefully designed A/B tests to inform their pricing and product definition decisions.

For some companies, A/B testing is a core part of their culture. For example, Booking.com conducted over 1,000 A/B tests per day on its website design. Management described it as "evidence-based, customer centric product development." New recruits to the company were screened for their "experimentation mindset" and embrace of the company's "test everything" mindset.¹⁹ The senior product manager of experimentation noted the importance of A/B testing as an antidote to guessing and hoping: "We see evidence every day that people are terrible at guessing. Our predictions of how customers will behave are wrong nine times out of ten."²⁰

Each of the examples above involved experiments in the real world. As an alternative, experiments can also be conducted in a laboratory setting by simulating a shopping scenario. In the laboratory setting, respondents are recruited and exposed to different scenarios, such as product features, product descriptions and ad support, or prices. Then the marketers either measure respondents' purchase intent or, in some cases, present respondents with cash compensation for participating in the experiment and observe whether the respondents use the money to purchase the product on the spot. The laboratory setting has the advantages of lower cost, quicker results, confidentiality, and *internal validity*—that is, the researcher easily controls all other variables, so ascribing the measured result to the manipulation is valid. The trade-off, however, is *external validity*—the confidence that the results can be extended from the laboratory situation to the real world.

Moving outside the laboratory into the field can be costly. First, field tests and **test markets** can be expensive to set up and, second, if one of the manipulations is not effective, at least some portion of the market has been affected by it (resulting in current and future lost sales).

Field experiments are a useful part of the researcher's toolkit because they assess what people do (rather than what they say they will do) and, if they are properly designed, they allow causal inferences to be made. In some instances, this is critical because even well-intentioned consumers may not be able to predict their behavior accurately. See **Video 2** for an example of an environmental-impact assessment at a hotel chain.



VIDEO 2 Innovative Ways to Change Customer Behavior



Scan this QR code, click the icon, or use the link to access the video: bit.ly/hbsp2unnlnL.

Nonexperimental Research

Now that we have explored what is involved in experimental research, let's look at how marketers use **nonexperimental research** to gain marketing intelligence. The taxonomy of Exhibit 2 divides nonexperimental research into approaches focused on qualitative data research (often best suited to initial market explorations) and quantitative data (which generally require previous knowledge of that market or a good understanding of the specific issues at hand).

Qualitative data research tends to be oriented not to simple facts (e.g., the frequency with which one purchases the *Financial Times*) but rather to more fundamental, open-ended questions, such as, "How do I feel when I have missed reading the *Financial Times*?" The most common qualitative research methods are in-depth individual interviews, focus groups, and direct observation (and its

close relative, empathetic design). The first two methods, which were also used in the Planters customer research, use open-ended questions such as “What do you consider when buying a new skin treatment?” Open-ended questions give subjects the ability to express themselves in their own terms.

In an in-depth individual interview, the interviewer does not have a predetermined set of questions to ask the respondent. Rather, the objective is to engage in a conversation with the respondent as he or she speaks freely and in detail about the topic of interest. These interviews may last an hour or more. Interview skills that keep the discussion on the topic of interest without unduly constraining the respondent are critical to this method’s success. A skillful interviewer uses follow-up questions to probe into the respondent’s feelings about the topic, expressed in his or her own terms. For example, L’Oréal conducted research interviews for its Plénitude brand and learned a critical piece of information when one participant described why she stopped using the brand: “To me it has a greasy feel. I don’t like it. You feel like you are putting Crisco on your face.”²¹

A focus group, on the other hand, relies on group interaction rather than an interviewer to stimulate discussion. It typically brings eight to ten people into a room (in person or via the Internet) for one to two hours of open-ended discussion on a topic managed by a moderator.

Companies often face a choice between the in-depth interview and a focus group. Focus groups are more commonly used because the interviewer effect is less strong, and companies are usually interested in the results of the group’s brainstorming. Yet focus groups can be difficult when the topic is sensitive. Thus, when Eli Lilly was planning the launch of Cialis, it conducted in-depth individual interviews with potential patients and partners of potential patients rather than using focus groups.²² In contrast, when Kiehl’s sought qualitative information on perceptions of its skin-care brand, focus groups were determined to be appropriate.²³

Focus groups are particularly appropriate for exploratory research—at the uncertain beginning of a project—when a company is entering a new market or product or service area and is looking for insights, perhaps not even knowing the right questions to ask. The open-ended nature of focus groups makes them a good instrument for drawing out the complexity of consumers’ thoughts and feelings.

One drawback to focus-group research, however, is that it can be relatively expensive (participants are usually paid a fee for their participation, given the time involved), so the group usually is small. That small number makes extrapolation of results to the general population problematic. Another

disadvantage is that the dynamics of the group may be such that less assertive members will go along with whatever the more vocal participants say. Skillful moderators try to ensure broad participation in the discussion. Despite these drawbacks, focus groups are widely used, and the information or tentative hypotheses obtained from focus-group participants can be tested at a later stage in quantitative ways.

Focus-group sessions are often recorded for later analysis or are viewed directly by the client firm. Direct viewing is preferred by many because it captures the expression of emotions that would be missing in a transcript. For example, Black & Decker's CEO Nolan Archibald reported the importance of watching recorded focus groups to sense the passion that tradespeople had about power tools and specific brands. (See the sidebar "Tips for a Better Focus-Group Session.")

Tips for a Better Focus-Group Session

- Be clear about the issue at stake.
- Select participants who have some standing or experience in the topic area.
- Engage a moderator who is knowledgeable about the topic but who will not be overbearing. This person should be able to draw people out, redirect them when they get off track, and prevent one or two people from dominating the discussion.
- Ensure that the moderator is objective and does not bias the discussion.

Although focus groups have been a staple of market research for many years, there has always been concern about the cost of assembling an in-person group and the possible effect of having all participants from the same geographic area. Thus, recent years have seen the emergence of the online focus group. For example, 20|20 Research, a proprietary research firm, offers two types of online focus groups.²⁴ In its QualBoard, a group is convened through an online chatroom, and the moderator poses a question; each participant is asked to post a response within some time limit, such as one hour. The post could be text, images, or video. Participants review each other's responses, and the moderator then prompts with another question. The firm's other online option, the QualMeeting focus group, uses web cams and video streaming to replicate, as much as possible, the experience of a live, on-site focus group.

The third and final qualitative approach is direct observation. Much can be learned by simply observing people in the act of shopping or using their purchases. *How* people shop can complement the knowledge of *what* was

purchased. For example, a home improvement and building supply store with precise sales data could benefit from knowing: Did those customers enter the store and proceed directly to the items on their shopping lists, or did they wander from aisle to aisle? Was this a frustrating hunt or a pleasant stroll? How many customers sought help or advice from store personnel? These are important questions and the answers can be informed by simply watching people. Some stores use video cameras for this purpose. Others have someone tag along with randomly selected shoppers. Researchers can now also use the Global Positioning System (GPS) function in smartphones to track the movements of shoppers within a store. Note that in all these cases, however, researchers should collect such data with the utmost respect for consumers' privacy, obtaining informed consent when appropriate and storing the data safely.

An inventive and effective direct-observation approach was Intuit's "follow-me-home" program, in which an Intuit employee asked a person purchasing Quicken software in a store if he or she could accompany the customer home to observe the installation of the software. Intuit knew that it could achieve its main goal (a delighted customer who recommended the product to others) only if the initial interaction with the product—its installation—was positive, so it was willing to make this effort to gain that knowledge.²⁵ Intuit's CFO commented on the importance of this program: "By observing someone in their natural habitat we can determine how often they get interrupted when they are trying to do taxes, payroll or perform some other task . . . that process of observing the customers provides us with deep customer immersion and has helped us focus on things customers really like and appreciate, and not burden them with things you can do but nobody cares about."²⁶ (For additional related information on direct-observation research, see the sidebar "Lead Users: A Special Class of People."²⁷)

Lead Users: A Special Class of People

When engaging in direct-observation research, marketers should pay attention to *lead users*. These users are individuals or companies—both customers and noncustomers—whose needs are far ahead of market trends. Such a user might be a pioneering radiologist searching for better methods of producing or interpreting images, or the user might be a military pilot, professional athlete, or engineer who has discovered a way of modifying off-the-shelf products to achieve substantially greater effectiveness in the field. Most are early adopters of new technologies. The demanding needs of lead users motivate them to produce innovations that suit their unique requirements—often before their suppliers even think of them. The adept marketing-intelligence gatherer will seek out and engage these users whenever possible.

Source: Harvard Business Essentials: Marketer's Toolkit: The 10 Strategies You Need to Succeed (Boston: Harvard Business Press, 2006), pp. 43–44.

Closely related to direct observation is the observational approach called **empathetic design**. Researchers observe people using a product or in the act of routine activities at home or at work, such as the approach used by the P&G Swiffer team that was shown in Video 1. Researchers and R&D personnel who conduct empathetic design look for “pain points” and user frustrations that might be eliminated through an innovative product or service design. Empathetic design is also used by product developers to uncover latent needs that may be difficult for a consumer to articulate. In the simplest terms, practitioners of empathetic design “walk in the shoes” of their subjects, observing and experiencing their world in purposeful ways. Some of those practitioners are actually trained anthropologists. IDEO, a leading design firm, offers a course in empathetic design that covers five “key skills for insights”:

- 1 Observe—“Listen with your eyes” and discover what people really care about.
- 2 Learning from Extremes—Stretch your thinking beyond assumptions and get to bolder ideas.
- 3 Interviewing—Conduct interviews to get deeper, more honest responses.
- 4 Immersive Empathy—Learn what it means to “walk in someone else’s shoes.”
- 5 Sharing Insights—Craft compelling insights that will inspire innovation.²⁸

Note that when considering any of the methods we have described, marketers should bear in mind that research has shown *the mere act of observing can alter the behavior of the observed subject*. Given that qualitative research methods usually bring researchers and subjects into close proximity (to varying degrees),

marketers should keep this caveat in mind and take care that the observation is as unobtrusive as possible.

Quantitative data research methods take a nonexperimental approach (see Exhibit 2) to collecting numeric data suitable for statistical analysis. Marketers usually do this with surveys, which can be used to collect data on a wide range of topics. As noted above, Planters used surveys to assess consumers' perceptions of the relative healthiness of various nut types, their awareness of Planters Peanuts, and the overall quality of Planters.

To find out how well the market would receive its new product, Colgate-Palmolive conducted a concept test in Mexico and China for Max Fresh toothpaste, which combines toothpaste and mouthwash.²⁹ In this survey (conducted by Nielsen as a **BASES test**, a popular research procedure), respondents were presented with a concept statement on the theme of a "new dimension of freshness" and asked how likely they would be to purchase the product; scoring was ranked on several different dimensions.

Surveys can be administered online, in person, over the phone, or by mail. In-person surveys are expensive but are sometimes necessary, especially for longer surveys or those that require tangible presentations of products. But most surveys and other kinds of quantitative research need not be expensive. Consider the relatively inexpensive online surveys sent by *Consumer Reports* (CR) via e-mail to its subscribers. CR, which tests and reports on the performance and quality of hundreds of consumer goods and services each year, uses these surveys to compile data on the performance, reliability, and owner satisfaction associated with automobiles, household appliances, and other products and services. CR's surveys, and others like them, are highly automated and can collect and array large volumes of data at low cost. For an example of common types of survey questions, see the sidebar "Crafting Quantitative Surveys."

Crafting Quantitative Surveys

Quantitative surveys use a variety of question types:

- **Closed-end questions** that limit the range of possible responses:
“Would you recommend this product to others?”
☐ Yes ☐ No ☐ Not sure
- **Dichotomous questions** that require a choice between two responses:
“When you purchased your VW Jetta, was it new or used?”
☐ New ☐ Used
- **Multiple-choice questions** that offer a list of possible answers:
“When you purchase a new car, how long do you usually keep it?”
☐ 1–2 years ☐ 3–4 years ☐ 5–6 years ☐ More than 6 years
- **A rating scale** that offers respondents a low-to-high continuum of possible responses:
“How would you rate the fuel efficiency of your vehicle?” (1 = poor; 5 = excellent)
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

The most reliable way of taking the pulse of a customer population is to conduct a **census**, that is, a polling of the entire population. A census may be feasible if the particular population being researched is small and accessible. However, because marketers often deal with large, widely dispersed populations (people whose professions might range from retired military personnel, for example, to teachers, hairdressers, or gardeners), the only practical and cost-effective way of tapping the insights and preferences of these populations is through sampling. A sample survey queries a subset of the total population of interest. Ideally, the data collected from this subset will allow researchers to make inferences applicable to the total population, allowing for some acceptable level of error.

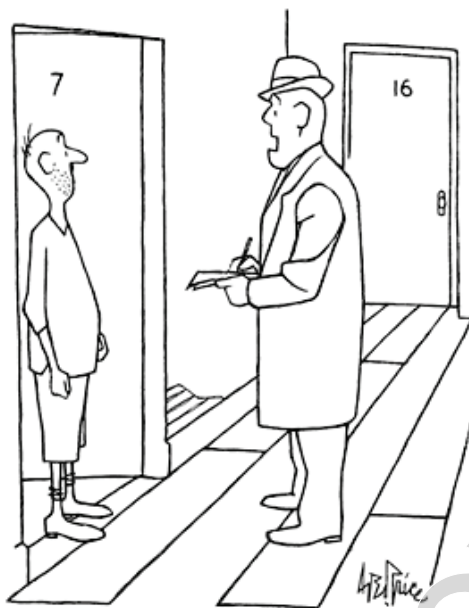
While the technicalities of sample surveying are beyond the scope of this reading,³⁰ the discipline of statistics can tell us *how many* individuals we must survey to make an inference about the larger population in question with a certain degree of confidence. It would also tell us that we should *select* those individuals randomly from the population.

Consider the following example: A student at Harvard Business School wanted to know how her fellow students felt about the school's proposed curriculum changes. She determined that, with an approximate MBA student body of 1,800, a sample size of 200 would be sufficient for the statistical significance she sought. But how would she select these 200 students? At first she considered sending an e-mail blast to the entire student body with the message: "What do you think of the proposed curriculum changes? Let me know if you'd like to be part of a survey." She would send a questionnaire to the first 200 who responded. She realized, however, that this approach would not yield a random sample because those who responded first would probably be students with strong opinions on the issue and not be representative of the student population as a whole. Thus, she simply chose a random sample of 200 from the total student body.

This example illustrates one possible source of error that can occur when taking a survey, namely, that nonrandom selection biases the outcome. Other sources of survey error include:

- Insufficient sample size; nonresponse from many selected participants
- Poorly constructed survey instrument
- Influence of interviewer biases on the way questions are asked
- Lack of truthfulness in respondents' answers

The *New Yorker* cartoon humorously depicts problems caused by interviewer bias and a poorly constructed survey instrument.



"Next question: I believe that life is a constant striving for balance, requiring frequent tradeoffs between morality and necessity, within a cyclic pattern of joy and sadness, forging a trail of bittersweet memories until one slips, inevitably, into the jaws of death. Agree or disagree?"

© George Price / The New Yorker Collection / www.cartoonbank.com, 1/9/1989

Surveys that attempt to pin down customer desires are hampered by the tendency of customers to describe what they want in terms of what they already have and understand. This problem is especially acute in areas of technology, where customers are not aware of the technical possibilities understood by company engineers and scientists. As Henry Ford famously quipped: "If I had asked people what they wanted, they would have said faster horses." And so today's survey respondents might say that they want faster computers, lighter-weight suitcases, more cat food flavors, cars with better fuel economy—that is, marginally different or improved versions of what they already have and understand. Steve Jobs shared Ford's thinking about the value (or lack thereof) of asking customers what they want. He didn't look to customers for his revolutionary ideas when creating his Apple devices.

Many surveys are now conducted online with free software. Some software companies have advertised their products as enabling one to create "a survey in minutes" with simple and easy-to-use tools. Care must be taken, however, to ensure valid, reliable data. The four-step model described in **Video 3** sets out the required discipline one needs to bring to survey design.



VIDEO 3 Get Meaningful Results from Your Surveys



Scan this QR code, click the icon, or use the link to access the video: bit.ly/hbsp2I7nlu3.

A variety of statistical techniques can be used to derive insight from the data collection effort. Two especially useful methods are conjoint analysis and perceptual mapping.

2.2.3 Conjoint Analysis

Conjoint analysis is a marketing research technique designed to determine how consumers value the different attributes or features that make up a product and the trade-offs they are willing to make among those different attributes or features.

Consumer Preferences and Market Research Limitations

To determine consumer preferences, market researchers can ask direct questions in a survey, for example, “In purchasing a new car, how important is fuel economy to you?” If those same marketers were to ask consumers a more detailed question—for example, “How much more valuable is a car with a 3.0-liter, six-cylinder engine, compared with a 4.8-liter, eight-cylinder engine?”—the average consumer would probably have trouble answering. Even if the consumer had expertise in the field and could respond with a numerical or a dollar value, that value still may not accurately represent the way the consumer would actually make choices once he or she is in the marketplace.

As marketers tried to find a solution to this complication, they discovered that the best way to determine the value of a specific product feature (such as fuel economy) is not to ask consumers a singular value question. Instead, the idea is to present them with a number of product options (cars, in this case) described not only by the measured product feature (size of the engine, which would affect fuel economy) but also by other product attributes or features (such as price, horsepower, upholstery, and brand).

How Conjoint Analysis Works

Conjoint analysis can be applied in several ways, including:

- *Defining a product:* A fundamental idea in conjoint analysis is that a product can be broken down into a set of relevant attributes. By defining products as collections of attributes and having the individual consumer react to a

number of alternative products, researchers can ultimately infer each attribute's relative importance for the consumer.

- *Study design:* In the simplest form of conjoint analysis, marketers present individuals with two different product options, each with different attributes, and ask them to choose their preferred option. By repeatedly asking potential customers to choose one option or a product bundle from a competing set (or to rate each of the product options on a numerical scale) and then running various regression analyses on the results, researchers can infer the value of each individual attribute, essentially replacing the relatively inaccurate method of asking the consumer about each attribute in isolation.

Conjoint analysis has become a tool in the repertoire of all major market research firms and of many companies. Today many industries use the conjoint analysis research technique when designing and pricing a product or product line. For example, earlier we described Basecamp's use of an experiment to configure and price its "freemium" offering optimally. Evernote also faced similar questions in pricing its note-taking software and productivity apps, and chose to address them via a conjoint survey rather than an experiment.³¹

Automobile manufacturers also use conjoint analysis with potential customers when cars are still in the design stage. In today's automotive market, the product design complexity overruns the capabilities of basic regression tests, and computerized software analysis is often used instead. In the computerized questionnaire, all the key attributes that the auto manufacturer wants to test are presented, such as the brand name, engine power, fuel consumption, environmental performance, and price. Data collection begins when consumers are presented with two product bundle descriptions—as shown in **Exhibit 3**—and then asked, "Given a choice between Car A and Car B, which do you prefer?"

EXHIBIT 3 Conjoint Analysis: Pairwise Comparison of Car Brands on Bundled Attributes

Car A	or	Car B
German brand		Japanese brand
Fulfills minimum environmental requirements		Exceeds minimum environmental requirements
Fuel consumption: 16 liters/100 km		Fuel consumption: 12 liters/100 km
Horsepower: 250		Horsepower: 220
Price: \$29,000		Price: \$23,000

If you prefer A, press A. If you prefer B, press B.

Source: Adapted and reprinted from Harvard Business School, "Analyzing Consumer Preferences," HBS No. 599-112, by Robert J. Dolan. Copyright © 1999 by the President and Fellows of Harvard College; all rights reserved.

Once the consumer makes a choice, the conjoint analysis software produces another pair of bundles and another choice to be made. With each choice, the program begins to “learn” the respondent’s preferences and adapts the questions to pinpoint the relative importance that the respondent places on each attribute in areas of uncertainty. Between 15 and 20 choices are typically needed to calibrate the underlying value system of each respondent. Once these value systems are calculated, the researcher can use the software to simulate various market scenarios and the product’s resulting market shares.

Conjoint analysis has a broad array of applications in industrial settings. The most common applications include:

- *Attribute importance.* Determine the overall importance and consumers’ willingness to pay for a proposed new product attribute or feature (e.g., a sunroof on a car; see Interactive Illustration 2).
- *Trade-off analysis.* Quantify the trade-offs that potential customers are willing to make among the various product features under consideration in the product design.
- *Market-share forecasting.* Predict the market share of a proposed new product given the current offerings of competitors (see the market share calculation formula and Interactive Illustration 3).
- *Cost-benefit analysis* (see Interactive Illustration 4). Weigh customer preference of product design features against their incremental costs.

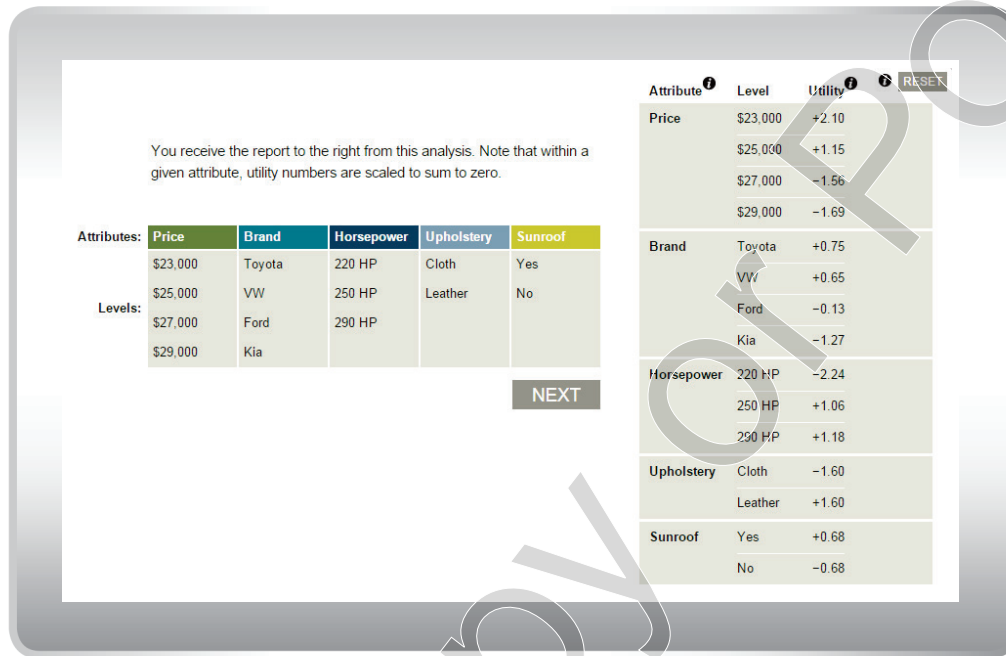
To help you understand and interpret conjoint analysis results, **Interactive Illustration 2** presents the output of a conjoint analysis study. The report provides the customer utility of 15 different aspects, from brands to engine size, to price levels. Using these utility scores, calculate the total customer utility of the provided bundle. By making a utility-positive change, such as adding a sunroof, the utility of the entire bundle increases. How much can you increase the price of the car to bring the customer utility back down to the original bundle that did not include the sunroof?



INTERACTIVE ILLUSTRATION 2 Interpretation of Conjoint Analysis Results



Scan this QR code, click the image, or use the link to access the interactive illustration: bit.ly/hbsp2GhN0o7



To forecast the market share, the company must know which other products a consumer is likely to consider when making a selection in the category. Each of the competitive products' features must be included in the experimental design. If these conditions are met, the market share can be calculated with the following market share calculation formula:

$$\text{Market Share}_i = \frac{e^{u_i}}{\sum_{j=1}^n e^{u_j}}$$

where

u_i is the estimated utility of product i

u_j is the estimated utility of product j

n is the total number of products in the competitive set

In **Interactive Illustration 3**, you can use the conjoint analysis utility output table provided to consider a closed market that sells only four cars, one from each car manufacturer. Using the market share calculation formula above, forecast the market share that will be captured by each car.



INTERACTIVE ILLUSTRATION 3 Market Share Forecasting with Conjoint Analysis



Scan this QR code, click the image, or use the link to access the interactive illustration: bit.ly/hbsp2untMXT.

To calculate a car manufacturer's expected market share, drag each of the **Utility Totals** into the denominator in the formula below, and select one car's **Utility Total** to drop into the numerator.

Attribute	Level	Utility
Price	\$23,000	+2.10
	\$25,000	+1.15
	\$27,000	-1.56
	\$29,000	-1.69
Brand	Toyota	-0.75
	VW	+0.65
	Ford	-0.13
	Kia	-1.27
Horsepower	220 HP	-2.24
	250 HP	+1.06
	290 HP	+1.18
Upholstery	Cloth	-1.60
	Leather	+1.60
Sunroof	Yes	+0.68
	No	-0.68

Car	Attributes	Utility Total
Toyota	250 HP, Cloth, No Sunroof, \$27,000	-2.03
VW	290 HP, Leather, No Sunroof, \$29,000	1.06
Kia	220 HP, Cloth, No Sunroof, \$23,000	-3.69
Ford	220 HP, Cloth, No Sunroof, \$23,000	-2.55

Market Share $_i = \frac{e^{u_i}}{\sum_{j=1}^4 e^{u_j}}$

u_i is the estimated utility of product i
 u_j is the estimated utility of product j

Market Share $_i = \frac{e^{\text{[]}}}{e^{\text{[]}} + e^{\text{[]}} + e^{\text{[]}} + e^{\text{[]}}}$

RESET

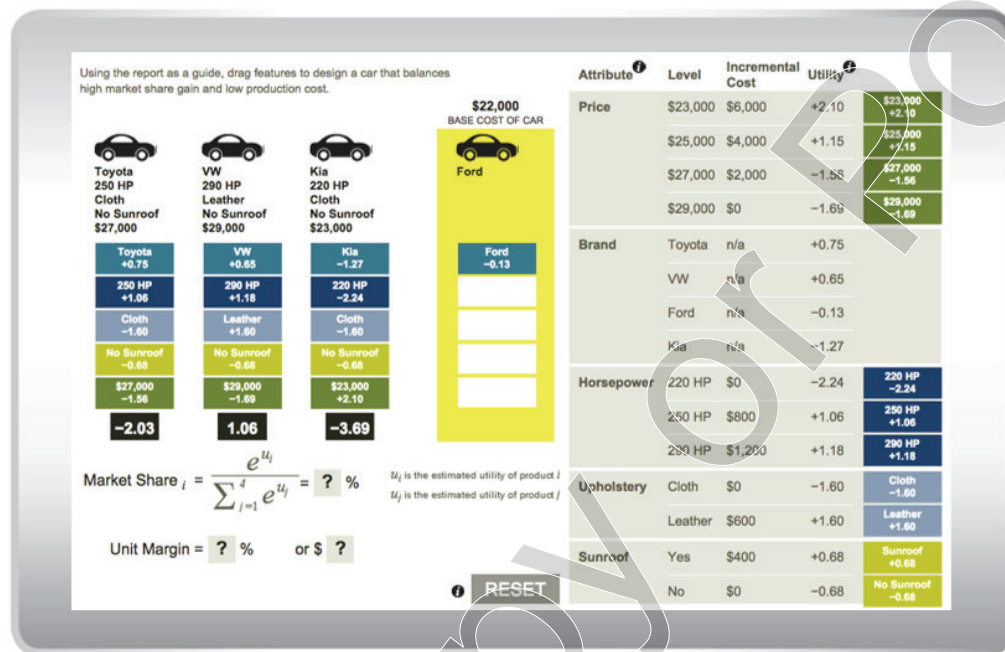
Interactive Illustration 4 offers you the opportunity to play the role of a brand manager at Ford in the same small, closed market presented in Interactive Illustration 3. Reacting to the utility scores of the three cars already on the market, design a product bundle for Ford that will balance high customer utility (and thus market share) and profit margin.



INTERACTIVE ILLUSTRATION 4 Conjoint and Cost-Benefit Analysis



Scan this QR code, click the image, or use the link to access the interactive illustration: bit.ly/hbsp2pF0E9V.



2.2.4 Perceptual Mapping

While conjoint analysis addresses consumer preferences and choice, **perceptual mapping** aims to develop an informative picture of how consumers perceive a brand and its competitors.

Pictures also play a role in new-product development, as evidenced by the common usage of terms such as *product positioning* and *market structure*. These terms suggest that managers are visualizing a map of the marketplace in which brands or products are positioned against one another and vie for spaces on the map. Accordingly, marketing managers often ask researchers to analyze data by means of perceptual mapping. This research tool was developed to replace the often informed but subjective judgment of managers on market structure with a framework based on hard data collected about customer perceptions.

Perceptual mapping derives its name from the fact that the output is a map of brands or products set out on coordinates defined by attributes relevant for the category. For example, L'Oréal engaged in perceptual mapping in support of its Plénitude product line.³² It collected data on 15 product attributes to understand customer perceptions of Plénitude and of key competitors' products, including Pond's, Oil of Olay (now called simply Olay), and Estée Lauder. The attributes included "good value for the money," "available in stores where you shop," "face

stays younger-looking,” “technologically advanced,” “relieves dryness,” and “exfoliates the skin.”

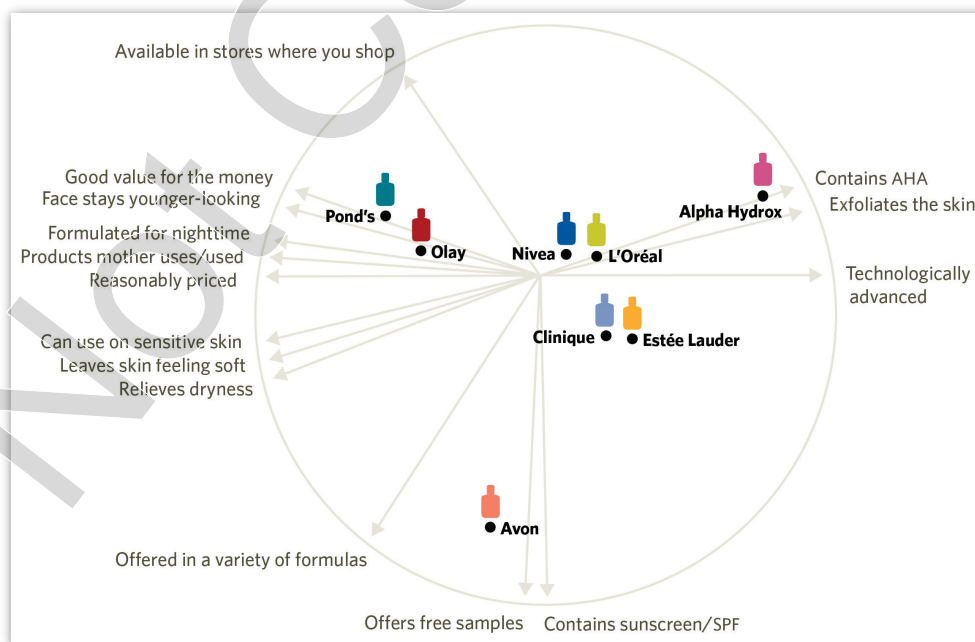
Using a scale ranging from -10 to +10, L’Oréal asked respondents to judge statements of the following sort:

Plénitude is “technically advanced”

where -10 = completely disagree, and 10 = completely agree

Data collected from respondents were analyzed statistically to produce a visual representation that captures, as closely as possible in two dimensions, the competing brands’ positions on the 15 attributes (**Exhibit 4**). The center of the circle is 0, or neutral; the higher the respondents rated a product on a given scale, the farther out the product is on the axis of that attribute. Brands close together were seen as similar to one another. Attribute arrows pointing in the same direction indicate attributes that consumers saw as highly correlated across brands. This map told L’Oréal that consumers perceived Plénitude to be similar to Nivea and close to Clinique and Estée Lauder. It was clearly different from Olay on many dimensions. Avon was very different from L’Oréal on a number of dimensions.

EXHIBIT 4 L’Oréal’s Perceptual Map of Brand Imagery



Source: Adapted from Harvard Business School, “L’Oreal of Paris: Bringing ‘Class to Mass’ with Plénitude,” HBS No. 598-056, by Robert J. Dolan. Copyright © 1997 by the President and Fellows of Harvard College; all rights reserved.

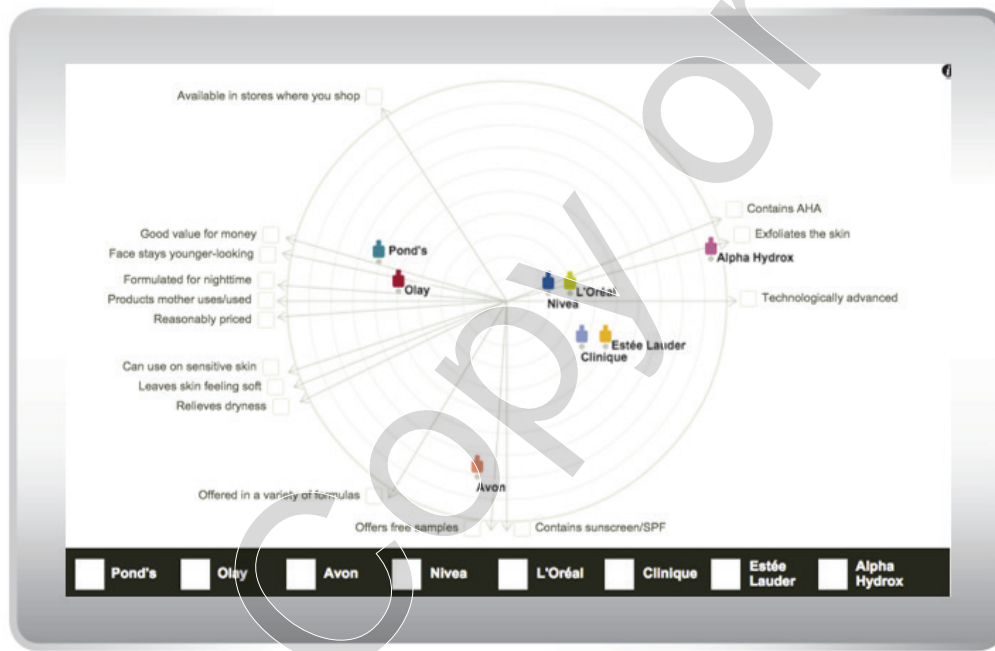
Interactive Illustration 5 presents the map in a way that allows you to isolate the data for each attribute as well as for each brand. Click on an attribute to see how strongly each brand was associated with that attribute. Alternatively, select a brand to see its scores across all attributes. Select two brands to compare how the market has scored them.



INTERACTIVE ILLUSTRATION 5 L'Oréal's Perceptual Map of Brand Imagery



Scan this QR code, click the image, or use the link to access the interactive illustration: bit.ly/hbsp2uiSaKc



Source: Adapted from Harvard Business School, "L'Oreal of Paris: Bringing 'Class to Mass' with Plénitude," HBS No. 598-056, by Robert J. Dolan. Copyright © 1997 by the President and Fellows of Harvard College; all rights reserved.

In this reading, we have described the basic intelligence-gathering techniques that marketers commonly use. We have also tried to illustrate how those methods can be crafted into an effective overall research program. Readers may refer to **Exhibit 5** for a concise chart of the main research tools used today by marketing managers and the market researchers who support them. The exhibit indicates when these tools are most appropriate, as well as caveats managers should consider in applying them.

EXHIBIT 5 Nonexperimental Research Methods

	Best Used When	Weaknesses
Conjoint analysis	The product or service is a complex bundle of attributes. There is a need to test a company's value proposition. You need to understand which combination of attributes will appeal most to customers.	Useful only when the product can be viewed as a bundle of attributes. Limited to informing product-design decisions.
Focus groups	The issues are not well understood. Attitudes and motivations must be uncovered. There is a need to generate ideas to be studied through quantitative research. The subject would make group interaction useful.	Expensive and time-consuming. Does not provide a representative sample. The moderator and group dynamics can skew results.
In-depth interview	The issues are not well understood. Attitudes and motivations must be uncovered. There is a need to generate ideas to be studied through quantitative research. A focus group would be difficult to conduct.	Expensive, especially for face-to-face interviews. Does not provide a representative sample. Results may not be easy to interpret or tabulate and may be vulnerable to interviewer bias.
Internal data	Budget is small or nonexistent. Data are available in the company's information systems.	Useful in describing what <i>has</i> happened but not what <i>might</i> happen.
Observation and empathetic design	You are trying to understand how people shop for or use products. You are probing for unspoken needs and pain points.	Seldom a stand-alone form of research. Expensive and time-consuming. Does not provide a representative sample.
Perceptual mapping	There is a need to understand the structure of particular product markets and to learn how the competitors' products are perceived.	Offers insights into perceptions only; does not address wants, preferences, and likelihood of purchase.
Review of secondary research ("desk research")	Budget is small or nonexistent. Speed is essential. You need to focus your primary data search through better understanding key uncertainties about the market.	Seldom provides the specific data that managers need in making marketing-mix decisions.
Surveys	Information is needed quickly. Budget is limited. You need to quantify market issues. Questions can be precisely stated.	Results are only as good as the survey design and sample population surveyed.
A/B testing	There is lots of traffic to website (can quickly and easily get large sample sizes). You can craft clearly defined research questions (e.g., Does one image on the home page do better at converting customers than a different image?).	Care is needed because consumers can understandably get upset when testing, for example, different prices or product benefits. Generalizability: Think clearly about whether your findings generalize to (i.e., apply to) other samples.

2.3 Building a Research Program

In the previous section, we looked at the advantages and disadvantages of various ways to gather research. Note that, because the appropriateness of a particular method varies according to the circumstances, researchers rarely rely on just one. Marketing research is an ongoing process, one that continues across the life of the product and brand. One set of methods may be most appropriate before a product launch, and another may be more feasible after the product has been well established. Therefore, marketers should continually assess information needs against appropriate methods of research.

It is one thing to build and execute marketing research and supply the resulting data; it's another to translate this data into insights that reflect a deep and informed understanding of the relationship among the customer, the marketing environment, and the company's offerings.

Unilever has articulated this in its creation of a successful "insights engine," the structure to support an understanding of customers in a way that drives business growth.³³ Some observations in a study of Unilever and other high-performing companies' insights functions include the following:

- "What matters now is not so much the quantity of data a firm can amass but its ability to connect the dots and extract value from the information along with an organization's ability to effectively link "disparate data sources."
- "Overperforming companies . . . embrace a culture of experimentation."
- In high-performing organizations "the insights functions were skilled at whole-brain thinking"—a balance between traditional quantitative analytics (left-brain thinking) and creativity, experimentation, and risk-taking (right-brain thinking).
- In any firm, the research team will "gather and analyze data. But today this is the minimum needed for success. Being able to translate this capability into customer-centric growth is what distinguishes winners from losers."³⁴

This reading describes a wide variety of techniques, including their strengths and weaknesses. This reading should provide a foundation for constructing a research program capable of providing insights and profitable action implications. With the array of techniques available, and with technology driving down the cost of data collection and time required, the days of "marketing by hope" should be crushed by a "marketing by knowing" attitude and skill set.

3 KEY TERMS

BASES test A concept test that assesses a sample of consumers' reactions to a concept with a key measure being their expressed purchase intention. With this measure and others, such as perceived uniqueness of the product, BASES makes a market share forecast.

census A complete canvas, count, or survey of an entire population that is being studied.

conjoint analysis A research tool that estimates how subjects set priorities or make trade-offs among different attributes of a product or service.

empathetic design Qualitative research that makes use of observation, particularly observations of people using a product or struggling with routine activities at home or at work.

experimental research Research that manipulates the environment and then measures the effect. This type of research seeks causal relationships.

field experiment Experimental research conducted outside a laboratory setting (e.g., test market).

nonexperimental research Qualitative or quantitative research that aims to answer questions about market size, customer preference, and trade-off behavior without introducing any manipulation of an environment.

perceptual mapping A research method whose output is an image representing customer perceptions of one company's offerings relative to those of competitors.

qualitative data research Research that generates information that is not amenable to numerical measurement or statistical analysis.

quantitative data research Research that collects numeric data, generally through sample surveys that can be used for measurement and statistical analysis.

test market A field experiment in which, for example, researchers place a new product in one or more stores, promote purchasing, and then observe customer responses.

treatment The manipulated variable in experimental research.

4 FOR FURTHER READING

Avery, Jill, Susan Fournier, and John Wittenbraker. "Unlock the Mysteries of Your Customer Relationships." *Harvard Business Review* 92 (July/August 2014): 72–81.

Cavusgil, S. Tamer, Gary Knight, John Riesenberger, and Attila Yaprak. "Fundamentals of International Market Research." In *Conducting Market Research for International Business*. New York: Business Expert Press, 2009, pp. 35–53.

Davenport, Thomas H., Leandro Dalle Mule, and John Lucker. "Know What Your Customers Want before They Do." *Harvard Business Review* 89 (December 2011): 84–92.

Ho, Teck-Hua, and Kay-Yut Chen. "New Product Blockbusters: The Magic and Science of Prediction Markets." *California Management Review* 50 (Fall 2007): 144–158.

John, Leslie K., Daniel Mochon, Oliver Emrich, and Janet Schwartz. "What's the Value of a Like?" *Harvard Business Review* 95 (March–April 2017): 108–115.

Kumar, V. Bharath Rajan, Rajkumar Venkatesan, and Jim Lecinski. "Understanding the Role of Artificial Intelligence in Personalized Engagement Marketing." *California Management Review* 61 (July 2019): 135–155.

Macdonald, Emma K., Hugh N. Wilson, and Umut Konus. "Better Customer Insight—in Real Time." *Harvard Business Review* 90 (September 2012): 102–108.

Magids, Scott, Alan Zorfas, and Daniel Leemon. "The New Science of Customer Emotions." *Harvard Business Review* 93 (November 2015): 66–76.

"The Power of Positive Surveying." *Harvard Business Review* 95 (January–February 2017): 34–35.

"The Science of Sensory Marketing." *Harvard Business Review* 93 (March 2015): 2–30.

5 ENDNOTES

- 1 Thomas Oliver, *The Real Coke, The Real Story*, New York: Penguin Books, 1984, p. 215.
- 2 Jia Wertz, "Marketing Mistakes Can Be Costly for Brands—Forever 21's Diet Bar Debacle Is a Perfect Example," *Forbes*, July 30, 2019, <https://www.forbes.com/sites/jiawertz/2019/07/30/marketing-mistakes-can-be-costly-for-brands-forever-21s-diet-bar-debacle-is-a-perfect-example/>, accessed July 30, 2019.
- 3 M. Ramanujan and G. Tacke, *Monetizing Innovation: How Smart Companies Design the Product Around the Price*, New York: Wiley, 2016, pp. 164–168.
- 4 Maarten Lagae, "Using the Power of Images to Maximize the Impact of the Diesel Pinterest Page," InSites Consulting, March 26, 2014, <http://www.insites-consulting.com/presentation/using-the-power-of-images-to-maximize-the-impact-of-the-diesel-pinterest-page/>, accessed September 10, 2019.
- 5 Anke Moerdycck, "10 Commandments of Contemporary Market Research," InSites Consulting, August 5, 2010, <http://www.insites-consulting.com/10-commandments-of-contemporary-market-research/>, accessed September 10, 2019.
- 6 Robert J. Dolan and D. Ngwe, "Planters Nuts," HBS No. 516004 (Boston: Harvard Business School Publishing, 2017).
- 7 Anke Moerdycck, "10 Commandments of Contemporary Market Research," InSites Consulting, August 5, 2010, <http://www.insites-consulting.com/10-commandments-of-contemporary-market-research/>, accessed September 10, 2019.
- 8 Robert J. Dolan, "The Black & Decker Corp. (A): Power Tools Division," HBS No. 595057 (Boston: Harvard Business School Publishing, 1995).
- 9 Thomas Steenburg, Jill Avery, and Naseem Dahod, "HubSpot: Inbound Marketing and Web 2.0," HBS No. 509049 (Boston: Harvard Business School Publishing, 2009).
- 10 Robert J. Dolan, "L'Oreal of Paris: 'Bringing Class to Mass' with Plenitude," HBS No. 598056 (Boston: Harvard Business School Publishing, 1997).
- 11 Euromonitor International, "Passport Database Access," <http://www.euromonitor.com/passport>, accessed April 25, 2014.
- 12 Forrester corporate site, "About Forrester," <https://www.forrester.com/marketing/vendor/vendor-relations.html>, accessed September 9, 2019.
- 13 Information on Sysomos (now Meltwater Social) is adapted from company data at <http://www.sysomos.com> and <https://www.meltwater.com/products/social/#>, accessed September 10, 2019.
- 14 Hootsuite, <http://www.hootsuite.com>, accessed September 1, 2019.
- 15 Elie Ofek, "Product Team Cialis: Getting Ready to Market," HBP No. 505038 (Boston: Harvard Business School Publishing, 2004).
- 16 Robert J. Dolan and Navid Mojir, "Aura Biosciences: Bringing a Breakthrough Drug to Market," HBP No. 520032 (Boston: Harvard Business School Publishing, 2018).
- 17 Frank Cespedes and Robb Fitzsimmons, "Basecamp: Pricing," Harvard Business School Publishing, HBP No. 817067, November 1, 2016.
- 18 Frank Cespedes and Robb Fitzsimmons, "Basecamp: Pricing," Harvard Business School Publishing, HBP No. 817067, November 1, 2016, p. 1.
- 19 Stefan Thomke and Daniela Beyersdorfer, "Booking.com," Harvard Business School Publishing, HBP No. 619015, October 2018.
- 20 Stefan Thomke and Daniela Beyersdorfer, "Booking.com," Harvard Business School Publishing, HBP No. 619015, October 2018, p. 5.

- 21 Robert J. Dolan, "L'Oreal of Paris: 'Bringing Class to Mass' with Plenitude," HBP No. 598056 (Boston: Harvard Business School Publishing, 1997).
- 22 Elie Ofek, "Product Team Cialis: Getting Ready to Market," HBS No. 505038 (Boston: Harvard Business School Publishing, 2004).
- 23 Robert J. Dolan and Leslie K. John, "Kiehl's Since 1851: Pathway to Profitable Growth," HBP No. 514044 (Boston: Harvard Business School Publishing, 2013).
- 24 20|20 Research, <http://www.2020research.com/qualboard/#> and <http://www.2020research.com/qualmeeting/>, accessed October 23, 2014.
- 25 Frank V. Cespedes, "Intuit," HBP No. 810018 (Boston: Harvard Business School Publishing, 2009).
- 26 J. Kosur, "Intuit's CEO Wants to Follow You Home and Watch You Work," *Business Insider*, December 16, 2015.
- 27 For more on lead users, see Eric von Hippel, "Lead Users: A Source of Novel Product Concepts," *Management Science* 32 (July 1986): 791–805.
- 28 IdeoU, "Foundations in Design Thinking Certificate," www.ideo.com/pages/design-thinking-certificate, accessed August 7, 2019.
- 29 John A. Quelch and Jacquie Labatt-Randle, "Colgate Max Fresh: Global Brand Roll-Out," HBS No. 508009 (Boston: Harvard Business School Publishing, 2007).
- 30 For more on sampling, see Janice H. Hammond, "Quantitative Methods Online Course," HBP No. 504702 (Boston: Harvard Business School Publishing, 2004).
- 31 Robert J. Dolan, "Evernote: Monetization Strategy," HBP No. 519034, January 23, 2019.
- 32 Robert J. Dolan, "L'Oreal of Paris: Bringing 'Class to Mass' with Plenitude," HBP No. 598056 (Boston: Harvard Business School Publishing, 1997).
- 33 Frank Van den Driest, Stan Sthanunathan, and Keith Weed, "Building an Insights Engine," R1609E, *Harvard Business Review* 00, no. 00 (September 2016): 64–74.
- 34 Frank Van den Driest, Stan Sthanunathan, and Keith Weed, "Building an Insights Engine," R1609E *Harvard Business Review* 00, no. 00 (September 2016): 64–74.

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