Research is cheap if you want to stay in business, expensive if you don't.

ANON

Marketing research

CHAPTER nine

Chapter objectives

After reading this chapter, you should be able to:

- Explain the importance of information to the company.
- Define the marketing information system and discuss its parts.
- Describe the four steps in the marketing research process.
- Compare the advantages and disadvantages of various methods of collecting information.
- Discuss the main methods for estimating current market demand.
- Explain specific techniques that companies use to forecast future demand.

Mini Contents List

◀ SOURCE: Corbis Sygma.
Photographer: Dean Francis.

Prelude case Market researching AIDS in Africa: a little achieves the unimaginable

In developed countries the threatened AIDS (acquired immune deficiency syndrome) epidemic is contained, although it is far from eradicated. The link between AIDS and HIV (human immunodeficiency virus) and the fact that HIV is mainly transmitted through unprotected sex and drug abuse are accepted and have changed people's behaviour. Public awareness and scare campaigns accounted for a lot of the success.

The situation in sub-Saharan Africa could not be more different. While the WHO (World Health Organisation) estimates that there are fewer than two million people with HIV/AIDS in the whole of North America, Europe and Central Asia, in sub-Saharan Africa the figure is 32 million and growing. Many of the sufferers are innocents. Mother-to-child infections have grown tenfold. The region now has 40 million AIDS orphans who, according to UNICEF, are 'putty in the hands of warlords'. In worst-hit Botswana, Namibia, Swaziland and Zimbabwe, between 20 and 25 per cent of the sexually active population are infected. A 15-year-old boy in Botswana has an 80 per cent chance of dying of AIDS.

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South Africa's isolation once protected it from the epidemic, but no more. It now has more HIV/AIDS sufferers than any other country in the world and up to a third of sexually active males are HIV-positive. In 1996 the life expectancy in South Africa was over 60 years. AIDS is likely to bring it down to under 40 years by 2010. Worse is yet to come. HIV/AIDS is hitting the most economically active members of the population. Without AIDS, Botswana's population of 40–49-year-olds would have been 300,000 in 2020. With AIDS it is expected to slump to fewer than 60,000!

Can the catastrophe be stopped? There is hope for drug donations from rich countries and the International AIDS Vaccine Initiative gives some hope. But among the gloom there are some successes. Senegal has remained largely AIDS free as a result of vigorous and unambiguous education programmes.

UNAIDS, the United Nations agency charged with fighting the disease, says the gap between Africa's needs and the donations of rich countries to help fight the disease is rising, but some local research is helping the meagre donations stretch further. Researchers in Tanzania found that spending on diseases did not relate to the disabilities and deaths they cause or the efficacy of treatment. Based on these findings, the inadequate health budget is now spent more effectively.

Uganda is close to the epicentre, but has turned the tide on AIDS. President Museveni acted on the threat as soon as he came to power. Uganda is a poor country but the President commissioned a series of inexpensive surveys (about €25,000 each) into the sexual behaviour of the population. These and other studies uncovered important reasons why AIDS is spreading:

- Sex is fun and an inexpensive recreation.
- Condoms make it less so: 'Would you eat a sweet with a wrapper on it?'
- Some men snip the ends of condoms they are about to use.
- The discussion of sex is often taboo.
- Myths abound: regular infusions of sperm make women grow up beautiful and men can get rid of HIV infection by passing it on to a virgin.
- Wives who ask their husbands to use a condom are in danger of being beaten up.
- Drinking local beers is another form of inexpensive entertainment but the inebriated are prone to unsafe sex.

Realising the scale of the problem and the shortage of funds, the President freed dozens of non-government organisations (NGOs) to educate people about unsafe sex. The NGOs used material and approaches that many other African countries found unacceptable, but within a five-year period the HIV-infected women in urban antenatal clinics fell from 30 to 15 per cent.[1]

Questions

1. What research would you commission to gather an understanding of the behaviour leading to the spread of HIV/AIDS?
2. Is it safe to rely on 'inexpensive research' to guide campaigns as critical as those against AIDS?
3. What are the dangers and benefits of freeing a range of NGOs to drive for a social good rather than a single, well-coordinated campaign?

Introduction

To carry out marketing analysis, planning, implementation and control, managers need information. As Uganda's President Museveni realised in his campaign against AIDS, you need information in order to act effectively. Information is not just an input for making better decisions, but also a marketing asset that gives competitive advantage of strategic importance. Competitors can copy each other's equipment, products and procedures, but they cannot duplicate the company's information and intellectual capital.

All companies start small, knowing their customers personally. Managers picked up marketing information by meeting people, observing them and asking questions. However, with growth they need more and better information. When they become national or international in scope, they need more information on larger, more distant markets. As incomes increase and buyers become more selective, sellers need even better information about how buyers respond to different products and appeals. As sellers use more complex marketing approaches and face more competition, they need information on the effectiveness of their marketing tools. Finally, in today's rapidly changing environments, managers need up-to-date information to make timely decisions. This increased market and customer sophistication has led to the prediction by Sir Martin Sorrell, chief executive of WWP, and the British Market Research Association that the market research industry will grow at twice the rate of marketing generally.[2]

The need for more and better information has been met by an explosion of information technology. The past 30 years have witnessed the emergence of small but powerful computers, text messaging, DVD drives, videoconferencing, broadband Internet access and other advances that have revolutionised information handling. Today's managers often receive too much information. For example, one study found that with all the companies offering data, and with all the information now available through supermarket scanners, a packaged-goods brand manager is bombarded with 1 million to 1 *billion* new numbers each week. Another study found that, on average, office workers spend 60 per cent of their time processing documents; a typical manager reads about a million words a week. Running out of information is not a problem but seeing through the 'data smog' is.[3]

Despite this data glut, marketers frequently complain that they lack enough information of the *right* kind. For example, a recent survey of managers found that although half the respondents said they couldn't cope with the volume of information coming at them, two-thirds wanted even more. The researcher concluded that 'despite the volume, they're still not getting what they want.'[4] Thus, most marketing managers don't need *more* information; they need *better* information. Companies have greater capacity to provide managers with good information, but often have not made good use of it. Many companies are now studying their managers' information needs and designing information systems to meet those needs.

The marketing information system

A **marketing information system (MIS)** consists of people, equipment and procedures to gather, sort, analyse, evaluate and distribute needed, timely and accurate information to marketing decision makers. Figure 9.1 illustrates the marketing information system concept. The MIS begins and ends with marketing managers. First, it interacts with these managers to assess their information needs. Next, it develops the needed information from internal company records, marketing intelligence activities and the marketing research process. Information analysis processes the information to make it more useful. Finally, the MIS distributes information to managers in the right form at the right time to help them in marketing planning, implementation and control.

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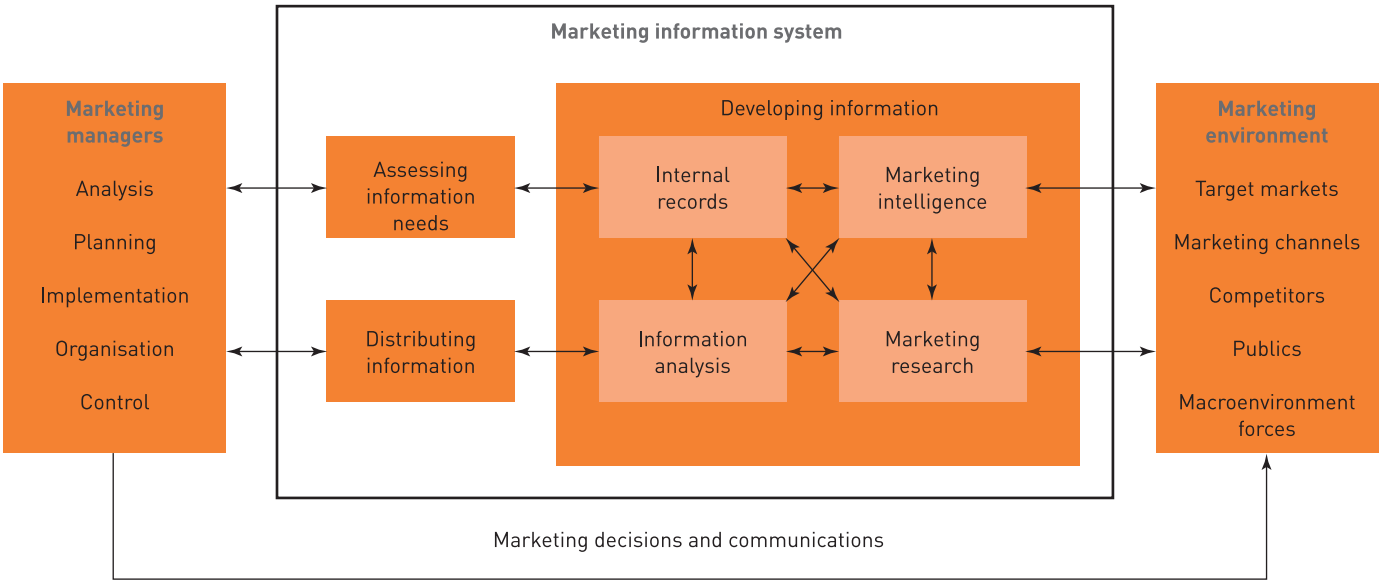


Figure 9.1 The marketing information system

Developing information

The information needed by marketing managers comes from *internal company records*, *marketing intelligence* and *marketing research*. The information analysis system then processes this information to make it more useful for managers.

Internal records

Internal records information—Information gathered from sources within the company to evaluate marketing performance and to detect marketing problems and opportunities.

Most marketing managers use internal records and reports regularly, especially for making day-to-day planning, implementation and control decisions. **Internal records information** consists of information gathered from sources within the company to evaluate marketing performance and to detect marketing problems and opportunities. The company's accounting department prepares financial statements and keeps detailed records of sales, orders, costs and cash flows. Manufacturing reports on production schedules, shipments and inventories. The sales force reports on reseller reactions and competitor activities. The customer service department provides information on customer satisfaction or service problems. Research studies done for one department may provide useful information for several others. Managers can use information gathered from these and other sources within the company to evaluate performance and to detect problems and opportunities.

Here is an example of how companies use internal records information in making better marketing decisions:

Istel is a cross-fertilization scheme set up by AT & T in Europe. The system helps retailers share information about customers. Under the programme customers join the Istel club, which gives them discounts when buying a range of products from member stores. AT & T estimates that its card will save the average customer €100 a year. The retailers then use the information to

build databases and to target incentives to valuable customers. 'The grocer may like to know who is a high spender in the scheme but is not shopping with them', says Ruth Kemp of Istel. 'Then they can offer incentives to use their store.'[5]

Information from internal records is usually quicker and cheaper to get than information from other sources, but it also presents some problems. Because internal information was intended for other purposes, it may be incomplete or in the wrong form for making marketing decisions. For example, accounting department sales and cost data used for preparing financial statements need adapting for use in evaluating product, sales force or channel performance. In addition, the many different areas of a large company produce great amounts of information, and keeping track of it all is difficult. The marketing information system must gather, organise, process and index this mountain of information so that managers can find it easily and get it quickly.

Marketing intelligence

Marketing intelligence is everyday information about developments in the marketing environment that helps managers prepare and adjust marketing plans. The marketing intelligence system determines the intelligence needed, collects it by searching the environment and delivers it to marketing managers who need it.

Marketing intelligence— Everyday information about developments in the marketing environment that helps managers prepare and adjust marketing plans.

Marketing intelligence comes from many sources. Much intelligence is from the company's personnel – executives, engineers and scientists, purchasing agents and the sales force. But company people are often busy and fail to pass on important information. The company must 'sell' its people on their importance as intelligence gatherers, train them to spot new developments and urge them to report intelligence back to the company.

The company must also persuade suppliers, resellers and customers to pass along important intelligence. Some information on competitors comes from what they say about themselves in annual reports, speeches, press releases and advertisements. The company can also learn about competitors from what others say about them in business publications and at trade shows. Or the company can watch what competitors do – buying and analysing competitors' products, monitoring their sales and checking for new patents.

Companies also buy intelligence information from outside suppliers. Dun & Bradstreet is the world's largest research company with branches in 40 countries and a turnover of €1.5 billion. Its largest subsidiary is Nielsen, which sells data on brand shares, retail prices and percentages of stores stocking different brands. Its Info*Act Workstation offers companies the chance to analyse data from three sources on the PCs: Retail Index, which monitors consumer sales and in-store conditions; Key Account Scantrack, a weekly analysis of sales, price elasticity and promotional effectiveness; and Homescan, a new consumer panel. Alliances between marketing research companies allow access to pan-European research. Leading European market research agencies all do more than half their work outside their own country. Among these are The Kanter Group and Taylor Nelson Sofres plc (UK), Nielson Media Research (The Netherlands), GfK and Sample Institut (Germany), Ipos Group SA (France) and Sifo Research (Sweden).[6]

Competitor intelligence

Competitor intelligence— Information gathered that informs on what the competition is doing or is about to do.

Marketing intelligence can work not only for but also against a company. Companies must sometimes take steps to protect themselves from the snooping of competitors. For example, Kellogg's had treated the public to tours of its plants since 1906, but recently closed its newly upgraded plant to outsiders to prevent competitors from getting intelligence on its high-tech

equipment. In Japan corporate intelligence is part of the industrial culture. Everyone from assembly-line workers to top executives considers it their duty to filter intelligence about the competition back to management. In its Bangkok offices one European organisation has a huge poster outside its lavatory saying: 'Wash and hush up! You never know who's listening! Keep our secrets secret.'[7]

Some companies set up an office to collect and circulate marketing intelligence. The staff scan relevant publications, summarise important news and send news bulletins to marketing managers. They develop a file of intelligence information and help managers evaluate new information. These services greatly improve the quality of information available to marketing managers. The methods used to gather competitive information range from the ridiculous to the illegal. Managers routinely shred documents because wastepaper baskets can be an information source. Other firms have uncovered more sinister devices such as Spycatcher's TPR recording system that 'automatically interrogates telephones and faxes. Also a range of tiny microphones.'

European firms lag behind their Japanese and American competitors in gathering competitive intelligence. In Japanese companies it is a long-established practice, for, as Mitsui's corporate motto says: 'Information is the life blood of the company.' In the US, competitive intelligence gathering has grown dramatically as more and more companies need to know what their competitors are doing. Sometimes, when the stakes are high, methods become questionable.

Procter & Gamble admitted to 'trash diving' at rival Unilever's headquarters. The target was Unilever's hair-care products – Salon Selectives, Finesse, Thermasilk, and Helene Curtis – which competed with P&G's Pantene, Head & Shoulders, and Pert brands. 'Apparently, the operation was a big success', notes an analyst. 'P&G got its mitts on just about every iota of info there was to be had about Unilever's brands.' However, when news of the questionable tactics reached top P&G managers they were shocked. They stopped the project, informed Unilever, and entered negotiations to right whatever competitive wrongs had been done. Although P&G claims it broke no laws, the company reported that the trash raids 'violated our strict guidelines regarding our business policies.'[8]

The techniques used to collect intelligence fall into the following four main groups.

Getting information from published materials and public documents

Keeping track of seemingly meaningless published information can provide competitor intelligence. For instance, the types of people sought in help-wanted ads can indicate something about a competitor's new strategies and products. Government agencies are another good source. Although it is often illegal for a company to photograph a competitor's plant from the air, aerial photos often are on file with geological survey or environmental protection agencies. These are public documents, available for a nominal fee. According to Leonard Fuld, founder of FCI: 'in some countries the government is a rare font of information. France has the Minitel, in the US we have an opus of information databases and networks.'

Competitors themselves may reveal information through their annual reports, business publications, trade show exhibits, press releases, advertisements and Web pages. The Internet is proving to be a vast new source of competitor-supplied information. Most companies now place volumes of information on their websites, providing details to attract customers,

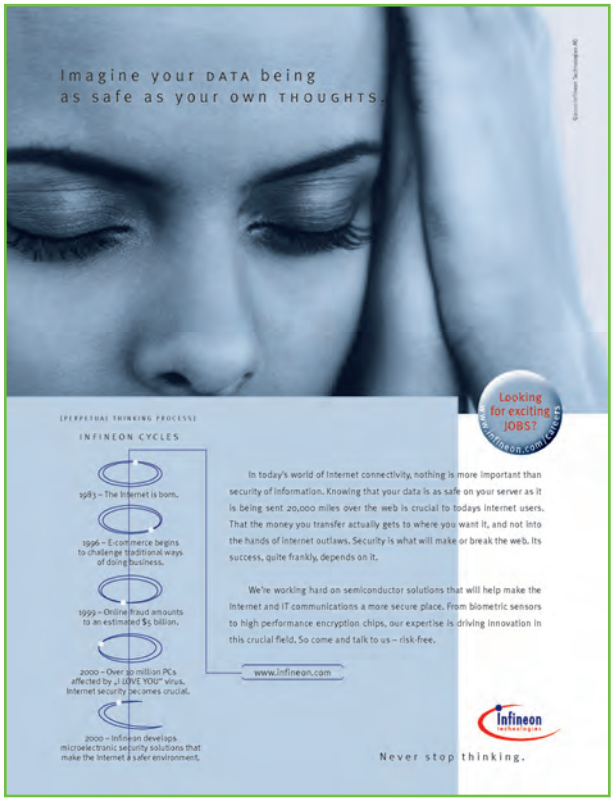
partners, suppliers or franchisees, and that same information is available to competitors at the click of a mouse button. Press releases that never made it into the press are posted on websites, letting firms keep abreast of competitors' new products and organisational changes. Help-wanted ads posted on the Web quickly reveal competitors' expansion priorities.

And it's not only company-sponsored websites that hold rich competitor intelligence booty. Researchers can also glean valuable nuggets of information from trade association websites.

> Gay Owen, controller of Stone Container's specialty-packaging division, visited a trade association Web site and noticed that a rival had won an award for a new process using ultra-violet resistant lacquers. The site revealed the machines' configuration and run rate, which Stone's engineers used to figure out how to replicate the process.[9]

Using Internet search engines, such as Yahoo! or Google, marketers can search specific competitor names, events or trends and see what turns up. There are thousands of online databases. Companies can subscribe to any of more than 3,000 online databases and information search services such as Dialog, DataStar, Lexis-Nexis, Dow Jones News Retrieval, UMI ProQuest, and Dun & Bradstreet's Online Access. Using such databases, companies can conduct complex information searches in a flash from the comfort of their keyboards.

LACP (www.LACP.com) provides users with a steady stream of intelligence data gleaned from the Internet. It searches the Web and gives users daily email reports detailing the business activities, financial moves and Internet dealings of competitors, prospects and clients, often before the information is officially reported. 'In today's information age, companies are



Protection against snooping competitors: the increasing importance of security on the Internet has led to the creation of companies like Infineon, which promotes its concerns about the issue and offers solutions 'to make the Internet and IT communications a more secure place'.
SOURCE: Infineon. *Agency*: J. Walter Thompson.

leaving a paper trail of information online', says Joshua Kopelman, executive vice president of Infonautics, the company that offers the service. 'Company Sleuth uncovers hard-to-find and seemingly hidden business news and information for users so they don't have to simply rely on old news or intuition when making investment and business decisions.'[10]

Getting information by observing competitors or analysing products

Companies can get to know competitors better by buying their products or examining other physical evidence. An increasingly important form of competitive intelligence is benchmarking – taking apart competitors' products and imitating or improving upon their best features. Benchmarking has helped JCB keep ahead in earthmoving equipment. The company takes apart its international competitors' products, dissecting and examining them in detail. JCB also probed the manufacturing operations, the types of machine tools used, their speeds, manning levels, labour costs, quality control and testing procedures, and raw material. It built up a profile of all its main competitors' operations and performance ratios against which to benchmark. In this way, the company knew the extent to which competitors could vary their prices, what their strengths and weaknesses were, and how JCB could exploit these data to its advantage.

Getting information from people who do business with competitors

Key customers can keep the company informed about competitors and their products:

> Gillette told a large account the date on which it planned to begin selling its new Good News disposable razor. The distributor promptly called Bic and told it about the impending product launch. Bic put on a crash programme and was able to start selling its razor shortly after Gillette did.

Intelligence can also be gathered by infiltrating customers' business operations:

> Companies may provide their engineers free of charge to customers . . . The close, cooperative relationship that the engineers on loan cultivate with the customers' design staff often enables them to learn what new products competitors are pitching.

Getting information from recruits and competitors' employees

Companies can obtain intelligence through job interviews or from conversations with competitors' employees. Approaches sometimes recommended include:

- When interviewing people for jobs, pay special attention to those who have worked for competitors, even temporarily.
- Send engineers to conferences and trade shows to question competitors' technical people.
- Advertise and hold interviews for jobs that don't exist in order to entice competitors' employees to spill the beans.
- Telephone competitors' employees and ask direct and indirect questions. 'The rule of thumb', says Jonathan Lax, founder of TMA, 'is to target employees a level below where you think you should start, because that person often knows just as much as his or her senior, and they are not as frequently asked or wary.' Secretaries, receptionists and switchboard operators regularly give away information inadvertently.

Why is Europe different?

Niame Fine, founder of Protec Data, believes there are differences between US and European companies. Language and cultural blocks limit cross-border intelligence gathering. Approaching competitors' employees is a subtle business and people are often put on their guard if approached by someone from a different country. She also says Europeans have greater loyalty than their job-hopping American counterparts.

Although most of these techniques are legal and some are considered to be shrewdly competitive, many involve questionable ethics. The company should take advantage of publicly available information, but avoid practices that might be considered illegal or unethical. A company does not have to break the law or accepted codes of ethics to get good intelligence. So far, many European businesses 'do as they would be done by' and linger at the ethical end of the spectrum of competitive intelligence. However, the European picture is not uniform. Paul Carratu, of Carratu International, put France and Italy alongside the US in their use of industrial espionage. One very high-profile British boss stands accused of sleuthing:

> Bob Ayling, ex-chief executive of British Airways, approached easyJet's founder, Stelios Haji-Ioannou, to ask whether he could visit. Ayling claimed to be fascinated by how the Greek entrepreneur had made the budget airline formula work. Haji-Ioannou not only agreed, but allegedly showed Ayling his business plan. A year later, British Airways announced the launch of Go. 'A carbon copy of easyJet', says easyGroup's director of corporate affairs. 'Same planes, same direct ticket sales, same use of a secondary airport, and same idea to sell on-board refreshments. They succeeded in stealing our business model – it was a highly effective spying job.'[11]

Other European companies are responding to the spying game by developing countermeasures:

> Unilever has begun widespread competitive intelligence training. According to a former Unilever employee, 'We were told how to protect information, as well as how to get it from competitors. We were warned to always keep our mouths shut when traveling. . . . We were even warned that spies from competitors could be posing as drivers at the minicab company we used.' Unilever even performs random checks on internal security. 'At one [internal] conference,we were set up when an actor was employed to infiltrate the group. The idea was to see who spoke to him, how much they told him, and how long it took to realize that no one knew him. He ended up being there for a long time.'[12]

Marketing research

Managers cannot always wait for information to arrive in bits and pieces from the marketing intelligence system. They often require formal studies of specific situations. For example, Apple Computer wants to know how many and what kinds of people or companies will buy its new ultralight personal computer. Or a Dutch pet product firm needs to know the

potential market for slimming tablets for dogs. What percentage of dogs are overweight, do their owners worry about it, and will they give the pill to their podgy pooches?[13] In these situations, the marketing intelligence system will not provide the detailed information needed. Because managers normally do not have the skills or time to obtain the information on their own, they need formal marketing research.

Marketing research—The function that links the consumer, customer and public to the marketer through information that is used to identify and define marketing opportunities and problems, to generate, refine and evaluate marketing actions, to monitor marketing performance, and to improve understanding of the marketing process.

Marketing research is the function linking the consumer, customer and public to the marketer through information that is used to identify and define marketing opportunities and problems, to generate, refine and evaluate marketing actions, to monitor marketing performance, and to improve understanding of the marketing process.[14] Marketing researchers specify the information needed to address marketing issues, design the method for collecting information, manage and implement the data collection process, analyse the results and communicate the findings and their implications.

Marketing researchers engage in a wide variety of activities, ranging from analyses of market potential and market shares to studies of customer satisfaction and purchase intentions. Every marketer needs research. A company can conduct marketing research in its research department or have some or all of it done outside. Although most large companies have their own marketing research departments, they often use outside firms to do special research tasks or special studies. A company with no research department will have to buy the services of research firms.

Many people think of marketing research as a lengthy, formal process carried out by large marketing companies. But many small businesses and non-profit organisations also use marketing research. Almost any organisation can find informal, low-cost alternatives to the formal and complex marketing research techniques used by research experts in large firms.

The marketing research process

The marketing research process (see Figure 9.2) consists of four steps: defining the problem and research objectives; developing the research plan; implementing the research plan; and interpreting and reporting the findings.

Defining the problem and research objectives

The marketing manager and the researcher must work closely together to define the problem carefully and must agree on the research objectives. The manager understands the decision for which information is needed; the researcher understands marketing research and how to obtain the information.

Managers must know enough about marketing research to help in the planning and in the interpretation of research results. If they know little about marketing research, they may obtain the wrong information, accept wrong conclusions, or ask for information that costs too much. Experienced marketing researchers who understand the manager's problem also need involvement at this stage. The researcher must be able to help the manager define the problem and to suggest ways in which research can help the manager make better decisions.

Defining the problem and research objectives is often the hardest step in the research process. The manager may know that something is wrong, without knowing the specific causes. For example, managers of a discount retail store chain hastily decided that poor advertising caused falling sales, so they ordered research to test the company's advertising.

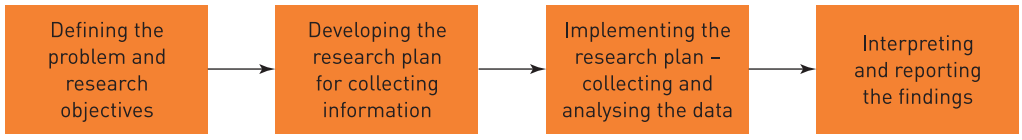


Figure 9.2 The marketing research process

It puzzled the managers when the research showed that current advertising was reaching the right people with the right message. It turned out that the chain stores were not delivering what the advertising promised. Careful problem definition would have avoided the cost and delay of doing advertising research. It would have suggested research on the real problem of consumer reactions to the products, service and prices offered in the chain's stores.

After the problem has been defined carefully, the manager and researcher must set the research objectives. A marketing research project might have one of three types of objective. The objective of **exploratory research** is to gather preliminary information that will help define the problem and suggest hypotheses. The objective of **descriptive research** is to describe things such as the market potential for a product or the demographics and attitudes of consumers who buy the product. The objective of **causal research** is to test hypotheses about cause-and-effect relationships.

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

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

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

'Pay as you go' mobile phones evolved from Italian exploratory research. People did not say they wanted 'pay as you go' but expressed anxiety about overspending on calls. Having developed the prepaid mobile phone system, it was tested using descriptive research to gauge consumers' reaction to the concept. Causal research then tested consumers' willingness to pay by testing various pricing options.[15]

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

Developing the research plan

The second step of the marketing research process calls for determining the information needed, developing a plan for gathering it efficiently and presenting the plan to marketing management. The plan outlines sources of existing data and explains the specific research approaches, contact methods, sampling plans and instruments that researchers will use to gather new data.

Determining information needs

Research objectives need translating into specific information needs.

Bolswessanen, the Dutch food and drinks company, decides to conduct research to find out how consumers would react to a new breakfast cereal aimed at the adult market. Across Europe young health-conscious people are abandoning croissants in France, rolls in Belgium and lonely espresso in Italy. Since Nestlé and General Mills set up Cereal Partners Worldwide as a joint venture, they have been very active in the market and the project has started to develop. The European breakfast cereal market has been growing fast, but own labels dominate the adult sector.[16] Can Bolswessanen successfully compete with Kellogg's, the market leader, and the aggressive new competitor, Cereal Partners Worldwide? The company's research might call for the following specific information:

1. The demographic, economic and lifestyle characteristics of current breakfast cereal users. (How do social and demographic trends affect the breakfast cereal market?)
2. Consumer-usage patterns for cereals: how much do they eat, where and when? (Will all the family eat the cereal or does each family member have their favourite?)
3. Retailer reactions to the new product. (Failure to get retailer support could hurt its sales.)
4. Consumer attitudes towards the new product. (Will consumers switch from own brands and is the product attractive enough to compete with Kellogg's?)
5. Forecasts of sales of the new product. (Will the new packaging increase Bolswessanen's profits?)

Bolswessanen's managers will need this and many other types of information to decide whether to introduce the new product.

Gathering secondary information

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

Primary data—Information collected for the specific purpose at hand.

Secondary data is information that already exists somewhere, having been collected for another purpose. **Primary data** consists of information collected for the specific purpose at hand.

Researchers usually start by gathering secondary data. The company's internal database provides a good starting point. However, the company can also tap a wide assortment of external information sources, ranging from company, public and university libraries to government and business publications.

Commercial data sources

Companies can buy secondary data reports from outside suppliers. For example, Nielsen Media Research sells data on brand shares, retail prices, and percentages of stores stocking different brands. Taylor Nelson Sofres offers TV Audience Measurement using a range of detection techniques to measure cable, satellite, digital and terrestrial TV viewing. Europanel GfK monitors purchases and consumption of over 70,000 households in 23 European countries.[17] These and other firms supply high-quality data to suit a wide variety of marketing information needs.

Online databases and Internet data sources

Most researchers use commercial *online databases*. Marketing researchers can conduct their own searches of secondary data sources. A readily available online database exists to fill almost any marketing information need. General database services such as CompuServe, Dialog and Lexis-Nexis put an incredible wealth of information at the keyboards of marketing decision makers. For example, a company doing business in Germany can check out CompuServe's German Company Library of financial and product information on over 48,000 German-owned firms. Just about any information a marketer might need is available from online databases.[18]

Advantages and disadvantages of secondary data

Secondary data can usually be obtained more quickly and at a lower cost than primary data. For example, an Internet or online database search might provide all the information Danone needs on yoghurt usage, quickly and at almost no cost. A study to collect primary information might take weeks or months and cost tens of thousands of euros. Also, secondary sources sometimes can provide data an individual company cannot collect on its own – information that either is not directly available or would be too expensive to collect. For example, it would be too expensive for Danone to conduct a continuing audit to find out about the market shares, prices and displays of competitors' brands. But it can use the Access Panel service of Ipsos which provides this information on 115,000 households across five European countries.

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

Secondary data provides a good starting point for research and often helps to define problems and research objectives. In most cases, however, the company must also collect primary data.

Planning primary data collection

Good decisions require good data. Just as researchers must carefully evaluate the quality of secondary information they obtain, they must also take great care in collecting primary data to ensure that they provide marketing decision makers with relevant, accurate, current and unbiased information. This could be **qualitative research** that measures a small sample of customers' views, or **quantitative research** that provides statistics from a large sample of consumers. Table 9.1 shows that designing a plan for primary data collection calls for a number of decisions on research approaches, contact methods, sampling plan and research instruments.

Research approaches

Observational research is the gathering of primary data by observing relevant people, actions and situations. For example:

- A French store chain sends *clients mystères* to pose as customers into its stores to check on customer service.
- Microsoft developed OneNote after observing how people make notes on pieces of paper that they often lose.
- Orange, Pace Micro Technology and GWR sponsored the Octagon study – 'reality research' involving 10 households being filmed over a four-week period by researchers who lived with them. It gave a unique insight into people's relationship to household gadgets.[19]

Qualitative research— Exploratory research used to uncover consumers' motivations, attitudes and behaviour. Focus-group interviewing, elicitation interviews and repertory grid techniques are typical methods used in this type of research.

Quantitative research— Research which involves data collection by mail or personal interviews from a sufficient volume of customers to allow statistical analysis.

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

Research approaches	Contact methods	Sampling plan	Research instruments
Observation Survey Experiment	Mail Telephone Personal Internet	Sampling unit Sample size Sampling procedure	Questionnaire Electronic instruments

Table 9.1 Planning primary data collection

Electronic observation is increasing in use as devices become more powerful, smaller and more intelligent.

- Nielsen and TNS attach 'people meters' to television sets in selected homes to record who watches what programmes. They provide summaries of the size and demographic make-up of audiences for different television programmes. The television networks use these ratings to judge programme popularity and to set charges for advertising time. Advertisers use the ratings when selecting programmes for their commercials.
- *Checkout scanners* in retail stores record consumer purchases in detail. Consumer products companies and retailers use scanner information to assess and improve product sales and store performance.
- **Single-source data systems** electronically monitor both consumers' purchases and consumers' exposure to various marketing activities to evaluate better the link between the two.

Single-source data systems—Electronic monitoring systems that link consumers' exposure to television advertising and promotion (measured using television meters) with what they buy in stores (measured using store checkout scanners).

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

Survey research is the approach best suited for gathering *descriptive* information. A company that wants to know about people's knowledge, attitudes, preferences or buying behaviour can often find out by asking them directly. Survey research is structured or unstructured. *Structured* surveys use formal lists of questions asked of all respondents in the same way. *Unstructured* surveys let the interviewer probe respondents and guide the interview according to their answers.

Survey research—The gathering of primary data by asking people questions about their knowledge, attitudes, preferences and buying behaviour.

Survey research may be direct or indirect. In the *direct* approach, the researcher asks direct questions about behaviour or thoughts: for example, 'Why don't you buy clothes at Gap?'. In contrast, the researcher might use the *indirect* approach by asking 'What kinds of people buy clothes at Gap?'. From the response to this indirect question, the researcher may be able to discover why some consumers avoid Gap clothing and why it attracts others. It may suggest reasons the consumer is not conscious of.

Survey research is the most widely used method for primary data collection and is often the only method used in a research study. The principal advantage of survey research is its flexibility. It can obtain many different kinds of information in many different marketing situations. Depending on the survey design, it may also provide information more quickly and at lower cost than observational or experimental research.

However, survey research also presents some problems. Sometimes people are unable to answer survey questions because they do not remember, or never thought about, what they did and why they did it. Or people may be unwilling to respond to unknown interviewers or about things they consider private. Respondents may answer survey questions even when they do not know the answer, simply in order to appear smarter or more informed than they are. Or they may try to help the interviewer by giving pleasing answers. Finally, busy people may not take the time, or they might resent the intrusion into their privacy. Careful survey design can help to minimise these problems.

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

Experimental research gathers *causal* information. Experiments involve selecting matched groups of subjects, giving them different treatments, controlling unrelated factors and checking for differences in group responses. Thus experimental research tries to explain cause-and-effect relationships. Observation and surveys can collect information in experimental research.

Before extending their product range to include fragrances, researchers at Virgin Megastores might use experiments to answer questions such as the following:

Observing how young children eat enables Nestlé to run a campaign that suggest an alternative serving method to that illustrated on the pack.
SOURCE: Cereal Partners, UK/Courtesy Société des Produits Nestlé S.A., trademark owners.

- How much will the fragrances increase Virgin's sales?
- How will the fragrances affect the sales of other menu items?
- Which advertising approach would have the greatest effect on sales of their fragrances?
- How would different prices affect the sales of the product?
- How will the product affect the stores' overall image?

For example, to test the effects of two prices, Virgin could set up a simple experiment. It could introduce fragrances at one price in one city and at another price in another city. If the cities are similar and if all other marketing efforts for the fragrances are the same, then differences in the price charged could explain the sales in the two cities. More complex experimental designs could include other variables and other locations.

Table 9.2 Strengths and weaknesses of the four contact methods

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

SOURCE: Adapted from *Marketing Research: Measurement and method*, 6th edn, Macmillan Publishing Company, (Tull, D.S. and Hawkins, D.I., 1993). Reprinted with permission from the estate of Donald S. Tull.

Contact methods

Mail, telephone, personal interviews and the Internet can collect data. Table 9.2 shows the strengths and weaknesses of each of these contact methods.

Postal questionnaires have many advantages. They can collect large amounts of information at a low cost per respondent. Respondents may give more honest answers to more personal questions on a postal questionnaire than to an unknown interviewer in person or over the phone, since there is no interviewer to bias the respondent's answers.

However, postal questionnaires also have disadvantages. They are not very flexible: they require simple and clearly worded questions; all respondents answer the same questions in a fixed order; and the researcher cannot adapt the questionnaire based on earlier answers. Mail surveys usually take longer to complete and the response rate – the number of people returning completed questionnaires – is often very low. Finally, the researcher often has little control over the postal questionnaire sample. Even with a good mailing list, it is often hard to control *who* at the mailing address fills out the questionnaire.[20]

Telephone interviewing is the best method for gathering information quickly and provides greater flexibility than postal questionnaires. Interviewers can explain questions that are not understood. Depending on the respondent's answers, they can skip some questions or probe further on others. Telephone interviewing also allows greater sample control. Interviewers can ask to speak to respondents with the desired characteristics, or even by name. Response rates tend to be higher than with postal questionnaires.[21]

However, telephone interviewing also has drawbacks. The cost per respondent is higher than with postal questionnaires and people may not want to discuss personal questions with an interviewer. Using interviewers increases flexibility, but also introduces interviewer bias. The way interviewers talk, small differences in how they ask questions and other differences may affect respondents' answers. Finally, different interviewers may interpret and record responses differently, and under time pressure some interviewers might even cheat by recording answers without asking questions.

Personal interviewing takes two forms – individual and group interviewing. *Individual interviewing* involves talking with people in their homes or offices, in the street, or in shopping malls. The interviewer must gain their cooperation and the time involved can range from a few minutes to several hours. Sometimes people get a small payment in return for their time. *Group interviewing* consists of inviting six to ten people to gather for a few hours with a trained moderator to talk about a product, service or organisation. The moderator needs objectivity, knowledge of the subject and industry, and some understanding of group and consumer behaviour. The participants are normally paid a small sum for attending. The meeting is usually in a pleasant place and refreshments are served to foster an informal

setting. The moderator starts with broad questions before moving to more specific issues, and encourages easy-going discussion, hoping that group interactions will bring out actual feelings and thoughts. At the same time, the moderator 'focuses' the discussion – hence the name **focus group** interviewing. The comments are recorded by written notes or on videotapes for study later. Focus group interviewing has become one of the key marketing research tools for gaining insight into consumer thoughts and feelings.[22]

Focus group—A small sample of typical consumers under the direction of a group leader who elicits their reaction to a stimulus such as an ad or product concept.

Personal interviewing is quite flexible and can collect large amounts of information. Trained interviewers can hold a respondent's attention for a long time and can explain difficult questions. They can guide interviews, explore issues and probe, as the situation requires. Personal interviews can utilise any type of questionnaire. Interviewers can show subjects actual products, advertisements or packages, and observe reactions and behaviour. In most cases, personal interviews can be conducted fairly quickly.

The main drawbacks of personal interviewing are costs and sampling problems. Personal interviews may cost three to four times as much as telephone interviews. Group interview studies usually employ small sample sizes to keep time and costs down, and it may be hard to generalise from the results. Because interviewers have more freedom in personal interviews, the problem of interviewer bias is greater.

Which contact method is best depends on what information the researcher wants and on the number and types of respondents needed. Advances in computers and communications have had an impact on methods of obtaining information. For example, most research firms now do Computer Assisted Telephone Interviewing (CATI). Professional interviewers call respondents, often using phone numbers drawn at random. When the respondent answers, the interviewer reads a set of questions from a video screen and types the respondent's answers directly into the computer. Although this procedure requires a large investment in computer equipment and interviewer training, it eliminates data editing and coding, reduces errors and saves time. Other research firms set up terminals in shopping centres – respondents sit down at a terminal, read questions from a screen and type their answers into the computer.

Internet data collection can be so quick, easy and inexpensive that some analysts predict that the Internet will soon be the primary marketing research tool.[23] Online researchers recognise that Web surfers are not representative of the population. Online users tend to be better educated, more affluent and younger than the average consumer, and a higher proportion are male. These are important consumers to companies offering products and services online. They are also some of the hardest to reach when conducting a research study. Online surveys are effective in reaching elusive groups, such as teen, single, affluent and well-educated audiences. Although much current Internet data collection is structured, where people complete online questionnaires, chat rooms and on line focus groups provide flexibility:

> Janice Gjersten, director of marketing for an online entertainment company, wants to gauge reaction to a new Web site. She contacts Cyber Dialogue, which provided focus group respondents drawn from its 10,000-person database. The focus group is held in an online chat room, which Gjersten 'looked in on' from her office computer. Gjersten could interrupt the moderator at any time with flash e-mails unseen by the respondents. Although the online focus group lacked voice and body cues, Gjersten says she will never conduct a traditional focus group again. Not only were respondents more honest, but the cost for the online group was one third that of a traditional focus group and a full report came to her in one day, compared to four weeks.[24]

When appropriate, online research offers marketers two distinct advantages over traditional surveys and focus groups: speed and cost-effectiveness. Online researchers can field quantitative studies and fill response quotas in only a matter of days. Online focus groups require some advance scheduling, but results are practically instantaneous. Research on the Internet is also relatively inexpensive. Participants can dial in for a focus group from anywhere in the world, eliminating travel, lodging and facility costs, making online chats cheaper than traditional focus groups. And for surveys, the Internet eliminates most of the postage, phone, labour and printing costs associated with other survey approaches. There is also no difference in the speed and cost of conducting an international survey rather than a domestic one.

Using the Internet to conduct marketing research does have some drawbacks. The method shares a problem with postal surveys: knowing who's in the sample. Trying to draw conclusions from a 'self-selected' sample of online users, those who clicked through to a questionnaire or accidentally landed in a chat room can be troublesome. Online research is not right for every company or product. For example, mass marketers who need to survey a representative cross-section of the population will find online research methodologies less useful, since most low-income consumers do not have online access.

Eye contact and body language are two direct, personal interactions of traditional focus-group research that are lost online. To overcome such sample and response problems, NPD and many other firms that offer online services construct panels of qualified Web regulars to respond to surveys and participate in online focus groups. NPD's panel consists of 15,000 consumers recruited online and verified by telephone; Greenfield Online picks users from its own database, then calls them periodically to verify that they are who they say they are. Another online research firm, Research Connections, recruits in advance by telephone, taking time to help new users connect to the Internet, if necessary.

Some researchers are wildly optimistic about the prospects for market research on the Internet. Marketing Insights 9.1 looks into some recent developments in market research on the Internet.

There is no one best contact method to use. The one chosen depends on the information needs, cost, speed and other issues. Table 9.3 shows quantitative data collection methods used across Europe. Rational reasons may account for only part of the variation shown. Face-to-face interview figures are particularly high in southern Europe and the United Kingdom. The low penetration of telephones in some of these countries may be an influence, but it may also reflect cultures who like socialising. For example, Ireland's high use of group discussions in qualitative research may reflect its people's love of conversation. The Scandinavians' use of telephone interviews is partly explained by their being large countries with small populations. In some countries, postal surveys do not work because of low literacy, but another reason is the unwillingness of people to respond. Research agencies and managers also have preferred methods, so they will also exert some personal influence on the choice of method. The relatively lower use of the Internet means that Internet data collection in Europe will lag behind that in the United States. In addition, the large differences in penetration of the Internet across Europe mean that its use will not be uniform.

Sampling plans

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

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

Designing the sample calls for three decisions. First, *who* is to be surveyed (what *sampling unit*)? The answer to this question is not always obvious. For example, to study the decision-making process for a family car purchase, should the researcher interview the husband, wife,

Marketing research on the Internet 9.1

marketing insights

As more consumers connect with the Internet, an increasing number of marketers are moving their research onto the Web. Although online research currently makes up less than 5 per cent of all marketing research spending, some say it could account for 50 per cent of all research spending.

Web research offers advantages over traditional surveys and focus groups. The most obvious advantages are speed and low costs. Online focus groups require some advance scheduling, but results are practically instantaneous. Survey researchers routinely complete their online studies in only a matter of days.

> The 10- to 15-minute Internet survey included dozens of questions along with 765 different images of labels, bottle shapes, and such. Some 600 teenagers participated over a three- to four-day period. Detailed analysis from the survey was available five days after all the responses had come in – lightning quick compared to offline efforts.

Internet research is also relatively low in cost. Participants can dial in for a focus group from anywhere in the world, eliminating travel, accommodation and living expenses. The Internet eliminates most of the postage, phone, labour and printing costs associated with other approaches. The cost of Web research 'can be anywhere from 10 per cent to 80 per cent less', says Tod Johnson, head of NPD Group. Moreover, sample size has little influence on costs. The Internet also works well for bringing together people from different parts of the world, especially those in higher-income groups who can't spare the time to travel to a central site.

However, using the Internet in marketing research does have some drawbacks. Many consumers still don't have access to the Internet. That makes it difficult to construct research samples that represent a broad cross-section of people. Still, as Internet usage broadens, many mainstream marketers are now using Web research. UPS uses online research extensively. 'Between 40 per cent and 50 per cent of our customers are online, so it makes sense', says John Gilbert, UPS marketing research manager. He finds little difference in the results of traditional and online studies, and the online studies are much cheaper and faster.

Another major problem of online research is controlling who's in the sample. Tom Greenbaum, president of Groups Plus, recalls a cartoon in which two dogs are seated at a computer: 'On the Internet, nobody knows you are a dog', one says to the other. 'If you can't see a person with whom you are communicating, how do know who they really are?', he says. To overcome such sample and response problems, many online research firms use opt-in communities and respondent panels. Because such

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respondents opt in and can answer questions whenever they are ready, they yield high response rates. Whereas response rates for telephone surveys have plummeted to less than 14 per cent in recent years, online response rates typically reach 40 per cent or higher.

Even when you reach the right respondents, online surveys and focus groups can lack the dynamics of more personal approaches. 'You're missing all of the key things that make a focus group a viable method', says Greenbaum. 'You may get people online to talk to each other and play off each other, but it's very different to watch people get excited about a concept.' The online world is devoid of the eye contact, body language and direct personal interactions found in traditional focus group research. And the Internet format – running, typed commentary and online 'emoticons' (punctuation marks that express emotion, such as :-) to signify happiness) – greatly restricts respondent expressiveness.

Increasingly, however, advances in technology – such as the integration of animation, streaming audio and video, and virtual environments – will help to overcome these limitations. 'In the online survey of the not-so-distant-future', notes an online researcher, 'respondents will be able to rotate, zoom in on and manipulate (like change the color or size of) three-dimensional products. They'll be able to peruse virtual stores, take items off shelves, and see how they function.'

Just as the impersonal nature of the Web hinders two-way interactions, it can also provide anonymity. This often yields less guarded, more honest responses, especially when discussing topics such as income, medical conditions, lifestyle or other sensitive issues. 'People hiding behind a keyboard get pretty brave', says one researcher. Adds another:

> From those questions that may simply make you squirm a little ('How much money did you lose in the stock market last month?'), to those you most probably don't want to answer to another human being, even if you don't know the person on the other end of the line ('How often do you have sex each week?'), Internet-based surveys tend to draw more honest responses. I once conducted the same survey in a shopping mall and via the Internet. The question was 'How often do you bathe or shower each week?'. The average answer, via the mall interview, was 6.2 times per week. The average via the Internet interview was 4.8 times per week, probably a more logical and honest response. ”

Perhaps the most explosive issue facing online researchers concerns consumer privacy. Critics worry that online researchers will spam our email boxes with unsolicited emails to recruit respondents. They fear that unethical researchers will

use the email addresses and confidential responses gathered through surveys to sell products after the research is completed. They are concerned about the use of electronic agents (called Spambots or Spiders) that collect personal information without the respondents' consent. Failure to address such privacy issues could result in angry, less cooperative consumers and increased government intervention.

Although most researchers agree that online research will never completely replace traditional research, some are wildly optimistic about its prospects. Others, however, are more cautious. 'Ten years from now, national telephone surveys will be the subject of research methodology folklore', proclaims one expert. 'That's a little too soon', cautions another. 'But in 20 years, yes.'

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SOURCES: Ian P. Murphy, 'Interactive research', *Marketing News* (20 January 1997), pp. 1, 17; 'NFO executive sees most research going to Internet', *Advertising Age* (19 May 1997), p. 50; Kate Maddox, 'Virtual panels add real insight for marketers', *Advertising Age* (29 June 1998), pp. 34, 40; Jon Rubin, 'Online marketing research comes of age', *Brandweek* (30 October 2000), pp. 26–8; 'Web smart', *Business Week* (14 May 2001), p. EB56; Noah Shachtman, 'Web enhanced market research', *Advertising Age* (18 June 2001), p. T18; Thomas W. Miller, 'Make the call: online results are a mixed bag', *Marketing News* (24 September 2001), pp. 30–5; David Jamieson, 'Online research gets fewer Euro votes', *Marketing News* (21 January 2002), p. 15; and Deborah Szynal, 'Gaining steam: big bytes', *Marketing News* (18 March 2002), p. 3.

Table 9.3 Selected European expenditure on ad hoc research

Country	Quantitative				Qualitative		
	Mail	Telephone	Face-to-face	Other	Group	In-depth	Other
Cyprus	1	13	27	4	4	1	–
Czech Republic	1	11	31	7	11	4	1
Denmark	6	20	4	10	12	2	1
Finland	6	18	10	7	4	1	–
France	1	10	20	11	9	3	2
Greece	1	9	26	3	11	3	–
Hungary	1	8	34	8	12	6	–
Ireland	3	15	26	2	16	3	–
Italy	1	21	24	–	8	2	2
Norway	11	39	15	1	6	2	–
Poland	–	6	20	8	13	3	2
Portugal	1	14	24	4	20	6	1
Romania	1	5	32	9	13	3	1
Slovak Republic	–	18	43	1	13	3	–
Spain	2	12	24	5	13	5	–
Switzerland	5	31	11	1	7	3	1
UK	7	19	33	8	9	4	–

SOURCE: Adapted from Tables 9 and 10 from *Trade Association estimates of expenditure*, in ESOMAR's Annual Study of the Market Research Industry, www.esomar.nl/press/industryreport01.htm, reprinted with permission from ESOMAR (European Society for Opinion and Market Research), www.esomar.org.

Table 9.4 Types of sampling

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

other family members or all of these? The responses obtained from different family members vary, so the researcher must determine the information needed and from whom.[25]

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

Third, *how* are the people in the sample *to be chosen* (what *sampling procedure*)? Table 9.4 describes different kinds of sample. Using *probability samples*, each population member has a known chance of being included in the sample, and researchers can calculate confidence limits for sampling error. But when probability sampling costs too much or takes too long, marketing researchers often take *non-probability samples*, even though their sampling error is not measurable. These varied ways of drawing samples have different costs and time limitations, as well as different accuracy and statistical properties. Which method is best depends on the needs of the research project.

Research instruments

In collecting primary data, marketing researchers have a choice of two main research instruments: the *questionnaire* and *mechanical devices*.

The *questionnaire* is by far the most common instrument. Broadly speaking, a questionnaire consists of a set of questions presented to a respondent for his or her answers. The questionnaire is very flexible – there are many ways to ask questions. Questionnaires need to be developed carefully and tested before their large-scale use. A carelessly prepared questionnaire usually contains several errors (see Table 9.5).

In preparing a questionnaire, the marketing researcher must decide what questions to ask, the form of the questions, the wording of the questions and the ordering of the questions. Questionnaires frequently leave out questions that need answering, but include questions that cannot be answered, will not be answered, or need not be answered. Each question should be checked to see that it contributes to the research objectives.

Closed-end questions—Questions that include all the possible answers and allow subjects to make choices among them.

The *form* of the question can influence the response. Marketing researchers distinguish between closed-end and open-end questions. **Closed-end questions** include all the possible answers, and subjects make choices among them. Part A of Table 9.6 shows the most common forms of closed-end questions as they might appear in an SAS survey of airline

Table 9.5 A 'questionable questionnaire'

Suppose that an adventure holiday director had prepared the following questionnaire to use in interviewing the parents of prospective campers. How would you assess each question?
1. What is your income to the nearest hundred euros? *People don't usually know their income to the nearest hundred euros, nor do they want to reveal their income that closely. Moreover, a researcher should never open a questionnaire with such a personal question.* 2. Are you a strong or a weak supporter of overnight camping for your children? *What do 'strong' and 'weak' mean?* 3. Do your children behave themselves well on adventure holidays? Yes ( ) No ( ) *'Behave' is a relative term. Furthermore, are 'yes' and 'no' the best response options for this question? Besides, will people want to answer this? Why ask the question in the first place?* 4. How many adventure holiday operators mailed literature to you last April? This April? *Who can remember this?* 5. What are the most salient and determinant attributes in your evaluation of adventure holidays? *What are 'salient' and 'determinant' attributes? Don't use big words on me!* 6. Do you think it is right to deprive your child of the opportunity to grow into a mature person through the experience of adventure holidays? *A loaded question. Given the bias, how can any parent answer 'yes'?*

Table 9.6 Types of question

A. Closed-end questions	
Name	**Description**
Dichotomous	A question offering two answer choices.
Multiple choice	A question offering three or more choices.
Likert scale	A statement with which the respondent shows the amount of agreement or disagreement.
Semantic differential	A scale is inscribed between two bipolar words, and the respondent selects the point that represents the direction and intensity of his or her feelings.
Importance scale	A scale that rates the importance of some attribute from 'not at all important' to 'extremely important'.
Rating scale	A scale that rates some attribute from 'poor' to 'excellent'.
Intention-to-buy scale	A scale that describes the respondent's intentions to buy.

B. Open-end questions	
Name	**Description**
Completely unstructured	A question that respondents can answer in an almost unlimited number of ways.
Word association	Words are presented one at a time, and respondents mention the first word that comes to mind.
Sentence completion	Incomplete sentences are presented one at a time, and respondents complete the sentence.
Story completion	An incomplete story is presented, and respondents are asked to complete it.
Picture completion	A picture of two characters is presented, with one making a statement. Respondents are asked to identify with the other and fill in the empty balloon.
Thematic Apperception Tests (TAT)	A picture is presented, and respondents are asked to make up a story about what they think is happening or may happen in the picture.

Table 9.6 continued

Table 9.6 (cont'd)

A. Closed-end questions: example

'In arranging this trip, did you personally phone SAS?' Yes ☐ No ☐

'With whom are you travelling on this flight?'

No one	☐	Children only	☐
Spouse	☐	Business associates/friends/relatives	☐
Spouse and children	☐	An organised tour group	☐

'Small airlines generally give better service than large ones.'

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

SAS Airlines

Large	x : : : : :	Small
Experienced	: : : : x :	Inexperienced
Modern	: : : x : :	Old-fashioned

'Airline food service to me is . . .'

Extremely important	Very important	Somewhat important	Not very important	Not at all important
1 _____	2 _____	3 _____	4 _____	5 _____

'SAS's food service is . . .'

Excellent	Very good	Good	Fair	Poor
1 _____	2 _____	3 _____	4 _____	5 _____

'If in-flight telephone service were available on a long flight, I would . . .'

Definitely buy	Probably buy	Not certain	Probably not buy	Definitely not buy
1 _____	2 _____	3 _____	4 _____	5 _____

B. Open-end questions: example

'What is your opinion of SAS?' _____

'What is the first word that comes to your mind when you hear the following?'

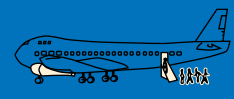
Airline _____
SAS _____
Travel _____

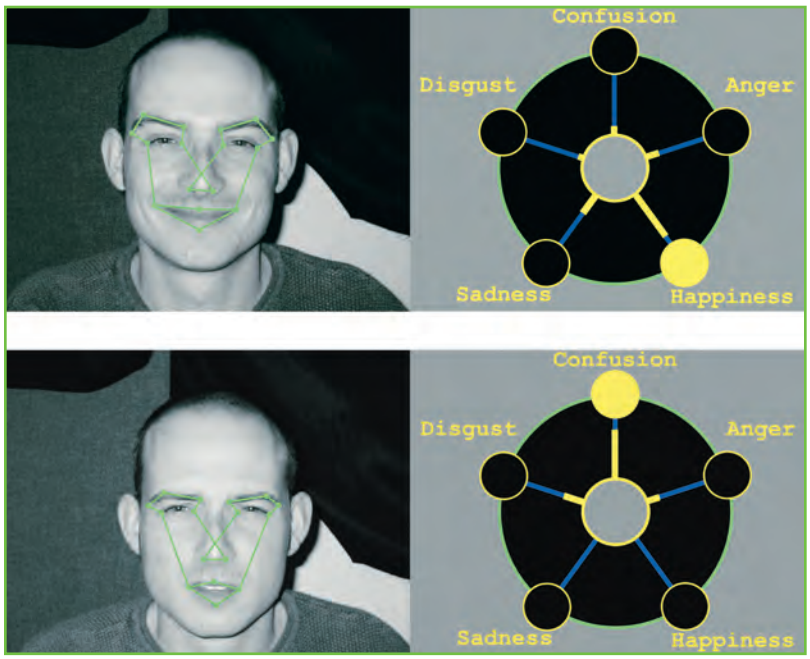
'When I choose an airline, the most important consideration in my decision is _____.'

'I flew SAS a few days ago. I noticed that the exterior and interior of the plane had very bright colours. This aroused in me the following thoughts and feelings.' Now complete the story.

Fill in the empty balloon.

Make up a story about what you see.





Electronic measures of consumer response allow marketers to look inside the brain or measure facial expressions to examine the response to marketing stimuli.
SOURCE: Integrated Media Systems Centre.

users. **Open-end questions** allow respondents to answer in their own words. The most common forms are shown in part B of Table 9.6. Open-end questions often reveal more than closed-end questions because respondents are not limited in their answers. Open-end questions are especially useful in exploratory research in which the researcher is trying to find out *what* people think, but not measuring *how many* people think in a certain way. Closed-end questions, on the other hand, provide answers that are easier to interpret and tabulate.

Open-end questions—Questions that allow respondents to answer in their own words.

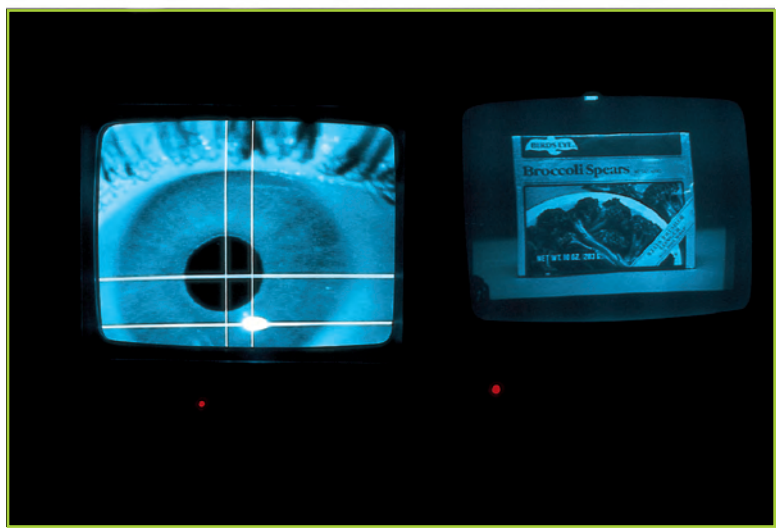
Researchers should also use care in the *wording* of questions. They should use simple, direct, unbiased wording. The questions should be pre-tested before use. The *ordering* of questions is also important. The first question should create interest if possible. Ask difficult or personal questions last, so that respondents do not become defensive. The questions should be in a logical order.

Although questionnaires are the most common research instrument, *mechanical instruments* are also used. We discussed two mechanical instruments – people meters and supermarket scanners – earlier in the chapter. Another group of mechanical devices measures subjects' physical responses. For example, a pupilometer tracks a person's eye movements and measures their interest in different stimuli by measuring pupil dilation. These machines are used extensively in the development and testing of Web designs. Once restricted to detecting external indicators of responses to stimuli, researchers are now looking inside the brain to observe responses to stimuli. A MEG (magnetoencephalograph) captures brain functions millisecond by millisecond to record how a brain responds to stimuli, such as an ad or new design, while magnetic resonance imaging (MRI) shows visual portrayals of a brain's responses.[26]

Presenting the research plan

At this stage, the marketing researcher should summarise the plan in a *written proposal*. A written proposal is especially important when the research project is large and complex, or when an outside firm carries it out. The proposal should cover the management problems addressed and the research objectives, the information obtained, the sources of secondary information or methods for collecting primary data, and the way the results will help

MEG scanner monitoring a brain's response to stimuli.
SOURCE: (AALS picture)
Twin Vision Productions.



Pupilometer measuring where eyes land and how long they linger on a given item.
SOURCE: (ALMIR) picture
Twin Vision Productions.

management decision making. The proposal should also include research costs. A written research plan or proposal makes sure that the marketing manager and researchers have considered all the important aspects of the research and that they agree on why and how to do the research.

Implementing the research plan

The researcher next puts the marketing research plan into action. This involves collecting, processing and analysing the information. Data collection can be by the company's marketing research staff or, more usually, by outside firms. The company keeps more control over the collection process and data quality by using its staff. However, outside firms that specialise in data collection can often do the job more quickly and at lower cost.

The data collection phase of the marketing research process is generally the most expensive and the most subject to error. The researcher should watch fieldwork closely to make sure that the plan is implemented correctly and to guard against problems with contacting respondents, with respondents who refuse to cooperate or who give biased or dishonest answers, and with interviewers who make mistakes or take short cuts.

Researchers must process and analyse the collected data to isolate important information and findings. They need to check data from questionnaires for accuracy and completeness, and code it for computer analysis. The researchers then tabulate the results and compute averages and other statistical measures.

Interpreting and reporting the findings

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

However, interpretation should not be by the researchers alone. They are often experts in research design and statistics, but the marketing manager knows more about the problem and the decisions needed. In many cases, findings can be interpreted in different ways and discussions between researchers and managers will help point to the best interpretations. The manager will also want to check that the research project was conducted properly and that all the necessary analysis was completed. Or, after seeing the findings, the manager may have additional questions that can be answered from the data. Finally, the manager is the one who must ultimately decide what action the research suggests. The researchers may even make the data directly available to marketing managers so that they can perform new analyses and test new relationships on their own.

Interpretation is an important phase of the marketing process. The best research is meaningless if the manager blindly accepts wrong interpretations from the researcher. Similarly, managers may have biased interpretations – they tend to accept research results that show what they expected and to reject those that they did not expect or hope for. Thus managers and researchers must work together closely when interpreting research results and both share responsibility for the research process and resulting decisions.

Demand estimation

When a company finds an attractive market, it must estimate that market's current size and future potential carefully. The company can lose a considerable amount of profit by overestimating or underestimating the market.

Demand is measured and forecast on many levels. Figure 9.3 shows 90 types of demand measurement! Demand might be measured for six different *product levels* (product item, product form, product line, company sales, industry sales and total sales), five different *space levels* (customer, territory, country, region, world), and three different *time levels* (short range, medium range and long range).

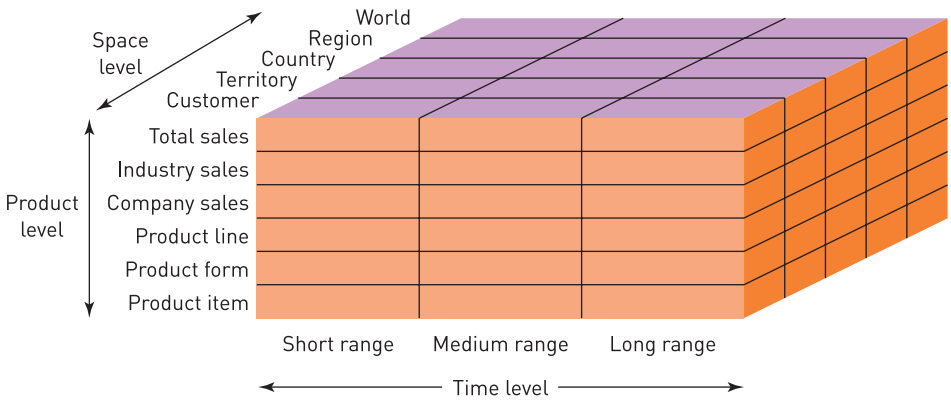


Figure 9.3 Ninety types of demand measurement ($6 \times 5 \times 3$)

Each demand measure serves a specific purpose. A company might forecast short-run total demand for a product as a basis for ordering raw materials, planning production and borrowing cash. Or it might forecast long-run regional demand for a big product line as a basis for designing a market expansion strategy.

Defining the market

Market—The set of all actual and potential buyers of a product or service.

Industry—A group of firms which offer a product or class of products that are close substitutes for each other. The set of all sellers of a product or service.

Potential market—The set of consumers who profess some level of interest in a particular product or service.

Available market—The set of consumers who have interest, income and access to a particular product or service.

Qualified available market—The set of consumers who have interest, income, access and qualifications for a particular product or service.

Served market (target market)—The part of the qualified available market that the company decides to pursue.

Penetrated market—The set of consumers who have already bought a particular product or service.

To economists, a market describes all the buyers and sellers who transact over some good or service. Thus the soft-drink market consists of sellers such as Coca-Cola, Pepsi-Cola, Tango and Lilt and all the consumers who buy soft drinks. The economist's interest is the structure, conduct and performance of each market.

To a marketer, a **market** is the set of all actual and potential buyers of a product or service. A market is the set of buyers and an **industry** is the set of sellers. The size of a market hinges on the number of buyers who might exist for a particular market offer. Potential buyers for something have three characteristics: *interest*, *income* and *access*.

Consider the consumer market for Finnish Tunturi exercise cycles. To assess its market, Tunturi must first estimate the number of consumers who have a potential interest in owning an exercise bike. To do this, the company could contact a random sample of consumers and ask the following question: 'Do you have an interest in buying and owning an exercise bike?'. If one person out of 10 says yes, Tunturi can assume that 10 per cent of the total number of consumers would constitute the potential market for exercise bikes. The **potential market** is the set of consumers who profess some level of interest in a particular product or service.

Consumer interest alone is not enough to define the exercise bike market. Potential consumers must have enough income to afford the product. They must be able to answer yes to the following question: 'Would you pay €500 for an exercise bike?'. The higher the price, the lower the number of people who can answer yes to this question. Thus market size depends on both interest and income.

Access barriers further reduce exercise bike market size. If Tunturi has no distributors for its products in some areas, potential consumers in those areas are not available as customers. The **available market** is the set of consumers who have interest, income and access to a particular product or service.

Tunturi might restrict sales to certain groups. Excessive repetitive exercise can damage young children, so sales of exercise bikes to anyone under 12 years of age may be discouraged. The remaining adults make up the **qualified available market** – the set of consumers who have interest, income, access and qualifications for the product or service.

Tunturi now has the choice of going after the whole qualified available market or concentrating on selected segments. Tunturi's **served market** is the part of the qualified available market it decides to pursue. For example, Tunturi may decide to concentrate its marketing and distribution efforts in northern Europe, where the winter nights are cold and long. This becomes its served market.

Tunturi and its competitors will end up selling a certain number of exercise bikes in their served market. The **penetrated market** is the set of consumers who have already bought exercise bikes.

Figure 9.4 brings all these market ideas together. The bar on the left of the figure shows the ratio of the potential market – all interested persons – to the total population. Here the potential market is 10 per cent. The bar on the right shows several possible breakdowns of the potential market. The available market – those who have interest, income and access – is 40 per cent of the potential market. The qualified available market – those who can meet the legal requirements – is 50 per cent of the available market (or 20 per cent of the potential market). Tunturi concentrates its efforts on 50 per cent of the qualified available market – the served

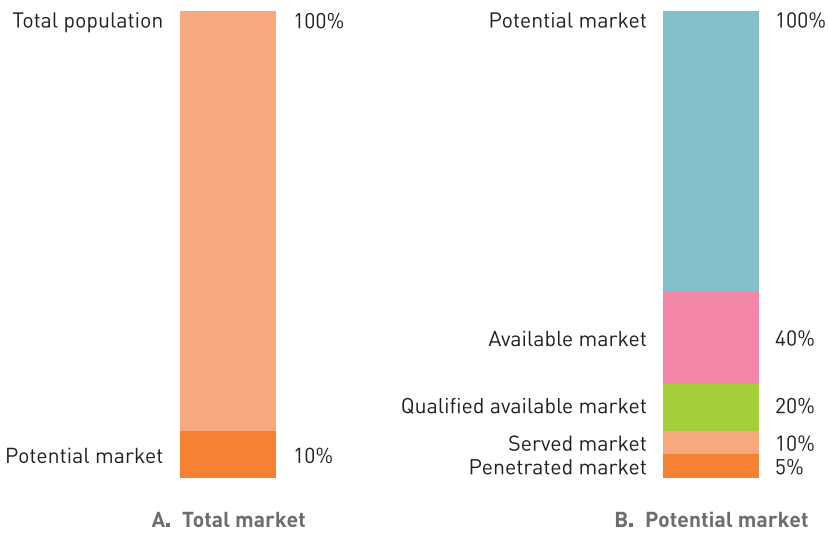


Figure 9.4 Levels of market definition

market, which is 10 per cent of the potential market. Finally, Tunturi and its competitors have already penetrated 50 per cent of the served market (or 5 per cent of the potential market).

These market definitions are a useful tool for marketing planning. If Tunturi is unsatisfied with current sales, it can take a number of actions. It can expand to other available markets in Europe or elsewhere. It can lower its price to expand the size of the potential market. It can try to attract a larger percentage of buyers from its served market through stronger promotion or distribution efforts to current target consumers. Or it can try to expand the potential market by increasing its advertising to convert non-interested consumers into interested consumers. Concern over heart disease means that many middle-aged people who have avoided exercise for years are being encouraged to do more. Perhaps Tunturi can work through the health industry to attract these.

Measuring current market demand

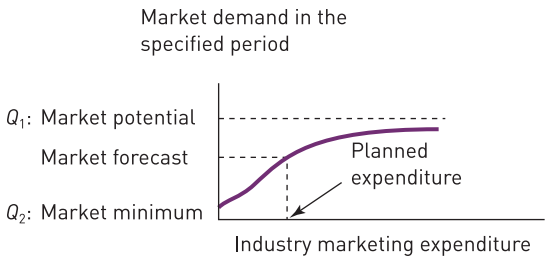
Marketers need to estimate three aspects of current market demand: total market demand, area market demand, and actual sales and market shares.

Estimating total market demand

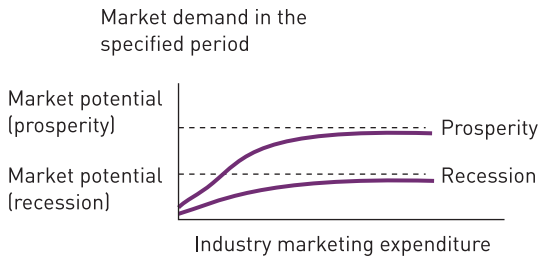
The **total market demand** for a product or service is the total volume that would be bought by a defined consumer group in a defined geographic area in a defined time period in a defined marketing environment under a defined level and mix of industry marketing effort.

Total market demand—The total volume of a product or service that would be bought by a defined consumer group in a defined geographic area in a defined time period in a defined marketing environment under a defined level and mix of industry marketing effort.

Total market demand is not a fixed number, but a function of the stated conditions. One of these conditions, for example, is the level and mix of industry marketing effort. Another is the state of the environment. Part A of Figure 9.5 shows the relationship between total market demand and these conditions. The horizontal axis shows different possible levels of industry marketing expenditure in a given period. The vertical axis shows the resulting demand level. The curve represents the estimated level of market demand for varying levels of industry marketing expenditure. Some base sales (called the *market minimum*) would take place without any marketing expenditure. Greater marketing expenditures would yield higher levels of demand, first at an increasing rate and then at a decreasing rate. Marketing expenditures above a certain level would not cause much more demand, suggesting an upper limit to



A. Market demand as a function of industry marketing expenditure (assumes a marketing environment of prosperity)



B. Market demand as a function of industry marketing expenditure (under prosperity vs. recession)

Figure 9.5 Market demand

market demand called the *market potential*. The industry market forecast shows the level of market demand corresponding to the planned level of industry marketing expenditure in the given environment.[27]

The distance between the market minimum and the market potential shows the overall sensitivity of demand to marketing efforts. We can think of two extreme types of market: the *expandable* and the *non-expandable*. An expandable market, such as the market for DVD recorders, is one whose size depends upon the level of industry marketing expenditures. For Figure 9.5A, in an expandable market, the distance between Q_1 and Q_2 would be fairly large. In a non-expandable market, such as that for opera, marketing expenditures generate little demand; the distance between Q_1 and Q_2 would be fairly small. Organisations selling in a non-expandable market can take **primary demand** – total demand for all brands of a given product or service – as given. They concentrate their marketing resources on building **selective demand** – demand for *their* brand of the product or service.

Primary demand—The level of total demand for all brands of a given product or service – for example, the total demand for motor cycles.

Selective demand—The demand for a given brand of a product or service.

Given a different marketing environment, we must estimate a new market demand curve. For example, the market for exercise bikes is stronger during prosperity than during recession. Figure 9.5B shows the relationship of market demand to the environment. A given level of marketing expenditure will always result in more demand during prosperity than it would during a recession. The main point is that marketers should carefully define the situation for which they are estimating market demand.

Companies have developed various practical methods for estimating total market demand. We will illustrate two here. Suppose EMI wants to estimate the total annual sales of recorded compact discs. A common way to estimate total market demand is as follows:

$$Q = n \times q \times p$$

where

Q = total market demand;
n = number of buyers in the market;
q = quantity purchased by an average buyer per year; and
p = price of an average unit.

Thus, if there are 10 million buyers of CDs each year and the average buyer buys six discs a year and the average price is €20, then the total market demand for cassette tapes is €1,200 million (= 10,000,000 × 6 × €20).

A variation on the preceding equation is the *chain ratio method*. Using this method, the analyst multiplies a base number by a chain of adjusting percentages. For example, the United Kingdom has no national service, so the British Army needs to attract 20,000 new male recruits each year. There is a problem here, since the Army is already under strength and the

population of 16- to 19-year-olds is declining. The marketing question is whether this is a reasonable target in relation to the market potential. The Army estimates market potential using the following method:

Total number of male secondary-school leavers	1,200,000
Percentage who are militarily qualified (no physical, emotional, or mental handicaps)	× 0.50
Percentage of those qualified who are potentially interested in military service	× 0.05
Percentage of those qualified and interested in military service who consider the Army the preferred service	× 0.60

This chain of numbers shows a market potential of 18,000 recruits. Since this is less than the target number of recruits sought, the Army needs to do a better job of marketing itself. They responded by doing motivational research which showed that existing advertising did not attract the target age group, although a military career did give them what they wanted. A new campaign therefore aimed to increase the attractiveness of a military career to both men and women.

Estimating actual sales and market shares

Besides estimating total and area demand, a company will want to know the actual industry sales in its market. Thus it must identify its competitors and estimate their sales.

The industry's trade association will often collect and publish total industry sales, although not listing individual company sales separately. In this way, each company can evaluate its performance against the industry as a whole. Suppose the company's sales are increasing at a rate of 5 per cent a year and industry sales are increasing at 10 per cent. This company is losing its relative standing in the industry.

Another way to estimate sales is to buy reports from marketing research firms that audit total sales and brand sales. For example, Nielsen and other marketing research firms use scanner data to audit the retail sales of various product categories in supermarkets and pharmacies, and sell this information to interested companies. A company can obtain data on total product category sales as well as brand sales. It can compare its performance with that of the total industry or any particular competitor to see whether it is gaining or losing in its relative standing.[28]

Forecasting future demand

Having looked at ways to estimate current demand, we now examine ways to forecast future market demand. **Forecasting** is the art of estimating future demand by anticipating what buyers are likely to do under a given set of conditions. Very few products or services lend themselves to easy forecasting. Those that do generally involve a product with steady sales, or sales growth in a stable competitive situation. But most markets do not have stable total and company demand, so good forecasting becomes a key factor in company success. Poor forecasting can lead to excessively large inventories, costly price markdowns, or lost sales due to being out of stock. The more unstable the demand, the more the company needs accurate forecasts and elaborate forecasting procedures.

Forecasting—The art of estimating future demand by anticipating what buyers are likely to do under a given set of conditions.

Huge investments ride on the back of forecasts. Current forecasts show a huge growth in the European satellite navigation (Sat-Nav) market for private automobiles from over €500 million in 2004. The rest of the Sat-Nav market (recreational marine craft, agriculture, etc.) is also about €500 million. The Europe Space Agency is developing Galileo as an alternative to the American global positioning system (GPS). Galileo will need a minimum of 30 four-tonne satellites in medium Earth orbit (20,000 km altitude) with three additional geostationary relay satellites in higher orbit. Total minimum cost: €3.5 billion. On the back of this the European Space Agency have to forecast how much of the market for launching the satellites they can grab and launch successfully. Meanwhile many consumers are uncertain about the value and usefulness of the €1,000 to €4,000 that in-car Sat-Nav systems cost.[29]

Companies commonly use a three-stage procedure to arrive at a sales forecast. First they make an *environmental forecast* (will the European politico-economy support a Sat-Nav system?), followed by an *industry forecast* (will the total Sat-Nav demand be €4 billion by 2008?) and a *company sales forecast* (what share of the Sat-Nav launch business can the European Space Agency get?). The environmental forecast calls for projecting inflation, unemployment, interest rates, consumer spending and saving, business investment, government expenditures, net exports and other environmental events important to the company. The result is a forecast of gross national product, which is used along with other indicators to forecast industry sales. Then the company prepares its sales forecast assuming a certain share of industry sales.

Companies use several specific techniques to forecast their sales. Table 9.7 lists some of these techniques. All forecasts build on one of three information bases: what people say, what people do, or what people have done. The first basis – *what people say* – involves surveying the opinions of buyers or those close to them, such as salespeople or outside experts. It includes three methods: surveys of buyer intentions, composites of sales force opinions and expert opinion. Building a forecast on *what people do* involves another method, that of putting the product into a test market to assess buyer response. The final basis – *what people have done* – involves analysing records of past buying behaviour or using time-series analysis or statistical demand analysis.

Table 9.7 Common sales forecasting techniques

Based on	Methods
What people say	Surveys of buyers' intentions Composite sales force opinions Expert opinion
What people do	Test markets
What people have done	Time-series analysis Leading indicators Statistical demand analysis

Buyers' intentions

One way to forecast what buyers will do is to ask them directly. This suggests that the forecaster should survey buyers. Surveys are especially valuable if the buyers have clearly formed intentions, will carry them out and can describe them to interviewers. A typical intention to buy survey would ask:

Do you intend to buy a car within the next six months?										
0.0 No chance	0.1	0.2 Slight chance	0.3	0.4 Fair chance	0.5	0.6 Good chance	0.7	0.8 Strong chance	0.9	1.0 For certain

This is a *purchase probability scale*. In addition, the various surveys ask about the consumer's present and future personal finances and their expectations about the economy. Consumer durable goods companies subscribe to these indices to help them anticipate significant shifts in consumer buying intentions, so that they can adjust their production and marketing plans accordingly. For *business buying*, various agencies carry out intention surveys about plant, equipment and materials purchases. These measures need adjusting when conducted across nations and cultures. Overestimation of intention to buy is higher in southern Europe than in northern Europe and the United States. In Asia, the Japanese tend to make fewer overstatements than the Chinese.[30]

Composite of sales force opinions

When buyer interviewing is impractical, the company may base its sales forecasts on information provided by the sales force. The company typically asks its salespeople to estimate sales by product for their individual territories. It then adds up the individual estimates to arrive at an overall sales forecast.

Few companies use their sales force's estimates without some adjustments. Salespeople are biased observers. They may be naturally pessimistic or optimistic, or they may go to one extreme or another because of recent sales setbacks or successes. Furthermore, they are often unaware of larger economic developments and do not always know how their company's marketing plans will affect future sales in their territories. They may understate demand so that the company will set a low sales quota. They may not have the time to prepare careful estimates or may not consider it worthwhile.

Accepting these biases, a number of benefits can be gained by involving the sales force in forecasting. Salespeople may have better insights into developing trends than any other group. After participating in the forecasting process, the salespeople may have greater confidence in their quotas and more incentive to achieve them. Also, such grass-roots forecasting provides estimates broken down by product, territory, customer and salesperson.

Expert opinion

Companies can also obtain forecasts by turning to experts. Experts include dealers, distributors, suppliers, marketing consultants and trade associations. Thus motor vehicle companies survey their dealers periodically for their forecasts of short-term demand. Dealer estimates, however, are subject to the same strengths and weaknesses as sales force estimates.

Many companies buy economic and industry forecasts. These forecasting specialists are in a better position than the company to prepare economic forecasts because they have more data available and more forecasting expertise.

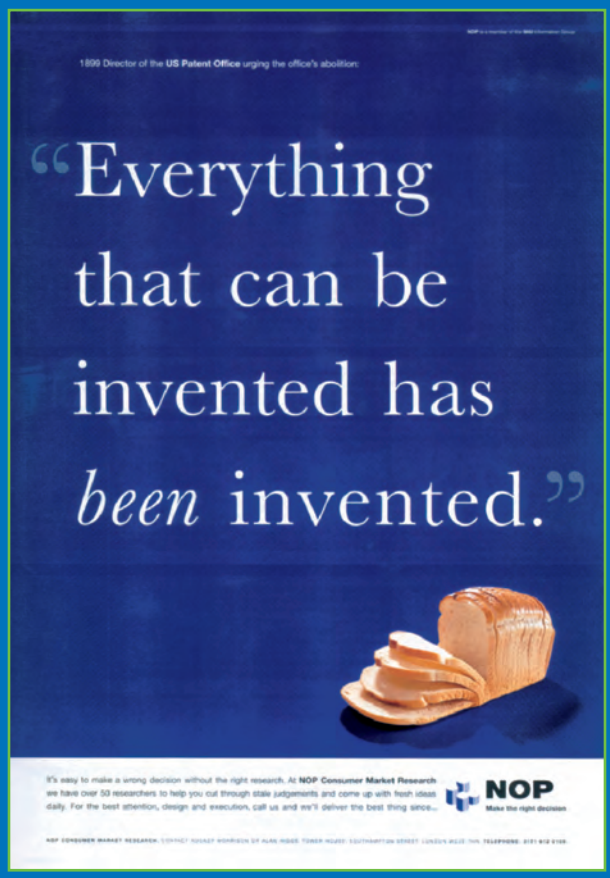
Occasionally companies will invite a special group of experts to prepare a forecast. They may exchange views and come up with a group estimate (group discussion method). Or they

may supply their estimates individually, with the company analyst combining them into a single estimate (pooling of individual estimates). Or they may supply individual estimates and assumptions reviewed by a company analyst, revised and followed by further rounds of estimation (Delphi method).

Experts can provide good insights upon which to base forecasts, but they can also be wrong (see Marketing Insights 9.2). Where possible, the company should back up experts' opinions with estimates obtained using other methods.

marketing insights

9.2 Sometimes 'expert opinion' isn't all it should be



SOURCE: NOP Research Group Ltd.

Before you rely too heavily on expert opinion, you might be interested in learning how some past 'experts' did with their predictions.

Technology:

- 'Everything that can be invented has been invented' (Director of the US Patent Office, 1899).
- 'Rail travel at high speed is not possible, because passengers, unable to breathe, would die of asphyxia' (Dr Dioysy Larder in 1828 – the year Stephenson's *Rocket* commenced service).

9.2...

- 'No large steamship will ever cross the Atlantic, since it would require more coal than it could carry' (Dr Larder again, this time in 1859). Two years later the *Great Eastern* crossed the Atlantic.
- 'Flight by machines heavier than air is unpractical and insignificant, if not impossible' (Simon Newcombe, 1901). Eighteen months later the Wright brothers flew.
- 'Airplanes are interesting toys, but of no military value' (France's Marshal Foch, 1911).
- 'The energy produced by the breaking down of the atom is a very poor kind of thing. Anyone who expects a source of power from the transformation is talking moonshine' (Ernest Rutherford, 1919, after *he* had first split the atom).
- 'I think there's a world market for about five computers' (Thomas J. Watson, IBM Chairman, 1943).
- 'By 1980, all power (electric, atomic, solar) is likely to be virtually costless' (Henry Luce, founder and publisher of *Time*, *Life* and *Fortune*, 1956).
- 'With over 50 foreign cars already on sale here, the Japanese auto industry isn't likely to carve out a big slice of the US market for itself' (*Business Week*, 1958).

SOURCE: NOP Research Group Ltd

Entertainment:

- 'If Beethoven's Seventh Symphony is not by some means abridged, it will soon fall into disuse' (Philip Hale, nineteenth-century music critic).
- 'Who the hell wants to hear actors talk?' (Harry Warner, founder of Warner Bros).
- 'TV won't be able to hold on to any market it captures after the first six months' (Daryl F. Zanuck, head of 20th Century Fox, 1946).
- 'We don't like their sound. Groups of guitars are on the way out' (Decca Recording Company, 1962, when turning down the Beatles). Pye, Columbia and HMV also rejected the Beatles before their signing with EMI.
- 'Unsinkable' (claim made by the *Titanic*'s builders, Harland and Wolff, in 1912, for the ship that cost $7.5 million to build). 'James Cameron has spent $200 million on a movie and it's a dog. He's finally had it!' (Quote repeated by film critic Adam Smith, referring to the blockbuster film *Titanic*).

Environment:

- 'Since populations tend to increase geometrically [1, 2, 4, 8, . . .] and food supply arithmetically [1, 2, 3, 4, . . .], the starvation of Great Britain is inevitable and imminent' (Thomas Robert Malthus, 1798).
- 'Population will soon outstrip food production' (Lester Brown of the Worldwatch Institute, 1973).
- 'Population will increase faster than world food production, so food prices will rise between 35 per cent and 115 per cent by 2000' (*Global 2000*, report to the President of the United States).

...9.2

- 'We could use up all of the proven reserves of oil in the entire world by the end of the next decade' (Club of Rome, 1972). They also made similar predictions for the reserves of aluminium, copper, lead, natural gas, silver, tin and zinc.

The results so far: known oil reserves are over 1,000 billion barrels, supplies have pushed metals, mineral and food prices down 40 per cent since 1960, and calories consumed per capita in the Third World are 27 per cent higher than in the 1960s!

SOURCES: Patrick McGilligan, *Clint: The Life and Legend* (London: HarperCollins, 1999); 'Sometimes expert opinion isn't all it should be', *Go* (September–October 1985), p. 2; Terry Coleman, *The Liners* (Harmondsworth: Penguin, 1976); Stephen Pile, *The Book of Heroic Failures* (London: Futura, 1980); Charles Gillett, *The Sound of the City: The rise of rock and roll* (London: Souvenir, 1983); 'Environmental scares: plenty of gloom', *The Economist* (20 December 1997); William A. Sherien, *The Fortune Seller: The big business of buying and selling predictions* (John Wiley, 1998); 'We woz wrong', *The Economist* (18 December 1999, pp. 61–2); *Encarta: Multimedia encyclopaedia* (Microsoft, 2000).

Test-market method

Where buyers do not plan their purchases carefully or where experts are not available or reliable, the company may want to conduct a direct test market. This is especially useful in forecasting new-product sales or established-product sales in a new distribution channel or territory. Test marketing is discussed along with new-product development in Chapter 14.

Time-series analysis

Time-series analysis—Breaking down past sales into their trend, cycle, season and erratic components, then recombining these components to produce a sales forecast.

Trend—The long-term, underlying pattern of sales growth or decline resulting from basic changes in population, capital formation and technology.

Many firms base their forecasts on past sales. They assume that statistical analysis can uncover the causes of past sales. Then analysts can use the causal relations to predict future sales. **Time-series analysis** consists of breaking down the original sales into four components – trend, cycle, season and erratic components – then recombining these components to produce the sales forecast.

Trend is the long-term, underlying pattern of growth or decline in sales resulting from basic changes in population, capital formation and technology. It is found by fitting a straight or curved line through past sales or technical performance.

Moore's Law is a technological trend projection based on Intel's founder, Gordon Moore's, observation in the 1970s that the number of transistors on a silicon chip (and hence computing power and speed) doubles every 18 months. He got it slightly wrong: since 1971 it has doubled every 1.96 years. But, as he observes, 'no exponential is forever'. One limit to Moore's Law is the size of electrons. Another is the heat generated by microprocessors. By 2005 microprocessors will be operating at the heat of a nuclear reactor and by 2010 at the heat of a rocket nozzle. And that is in the middle of your lap top![31]

Cycle captures the medium-term, wavelike movement of sales resulting from changes in general economic and competitive activity. The cyclical component can be useful for medium-range forecasting. Cyclical swings, however, are difficult to predict because they do not occur on a regular basis. **Seasonality** refers to a consistent pattern of sales movements within the year. The term *season* describes any recurrent hourly, daily, weekly, monthly or quarterly sales pattern. The seasonal component may relate to weather factors, holidays and trade customs. The seasonal pattern provides a norm for forecasting short-range sales. Finally, *erratic events* include fads, strikes, snow storms, earthquakes, riots, fires and other disturbances. These components, by definition, are unpredictable and should be removed from past data to see the more normal behaviour of sales.

Cycle—The medium-term wavelike movement of sales resulting from changes in general economic and competitive activity.

Seasonality—The recurrent consistent pattern of sales movements within the year.

Suppose that ING sells 12,000 new life insurance policies this year and wants to predict next year's December sales. The long-term trend shows a 5 per cent sales growth rate per year. This information alone suggests sales next year of 12,600 (= 12,000 × 1.05). However, a business recession is expected next year, which will probably result in total sales achieving only 90 per cent of the expected trend-adjusted sales. Sales next year are therefore more likely to be 11,340 (= 12,600 × 0.90). If sales were the same each month, monthly sales would be 945 (= 11,340/12). However, December is an above-average month for insurance policy sales, with a seasonal index standing at 1.30. Therefore December sales may be as high as 1,228.5 (= 945 × 1.3). The company expects no erratic events, such as strikes or new insurance regulations. Thus it estimates new policy sales next December at 1,228.5 policies.

Leading indicators

Many companies try to forecast their sales by finding one or more **leading indicators**: that is, other time series that change in the same direction but ahead of company sales. For example, a plumbing supply company might find that its sales lag behind the housing starts index by about four months. An index of housing starts would then be a useful leading indicator.

Leading indicators—Time series that change in the same direction but in advance of company sales.

Statistical demand analysis

Time-series analysis treats past and future sales as a function of time, rather than as a function of any real demand factors. But many real factors affect the sales of any product. **Statistical demand analysis** is a set of statistical procedures used to discover the most important real factors affecting sales and their relative influence. The factors most commonly analysed are prices, income, population and promotion.

Statistical demand analysis consists of expressing sales (Q) as a dependent variable and trying to explain sales as a function of a number of independent demand variables $X_1, X_2, \ldots, X_n$. That is:

$$Q = f(X_1, X_2, \ldots, X_n)$$

Using multiple-regression analysis, various equations can be fitted to the data to find the best predicting factors and equation.

For example, the South of Scotland Electricity Board developed an equation that predicted the annual sales of washing machines (Q) to be:[32]

$$Q = 210{,}739 - 703P + 69H + 20Y$$

where

P = average installed price;
H = new single-family homes connected to utilities; and
Y = per capita income.

Statistical demand analysis—A set of statistical procedures used to discover the most important real factors affecting sales and their relative influence; the most commonly analysed factors are prices, income, population and promotion.

Thus in a year when an average installed price is £387 (€635), there are 5,000 new connected homes and the average per capita income is £4,800, from the equation we would predict the actual sales of washing machines to be 379,678 units:

$$Q = 210{,}739 - 703(387) + 69(5{,}000) + 20(4{,}800)$$

The equation was found to be 95 per cent accurate. If the equation predicted as well as this for other regions, it would serve as a useful forecasting tool. Marketing management would predict next year's per capita income, new homes and prices, and use them to make forecasts.

Statistical demand analysis can be very complex and the marketer must take care in designing, conducting and interpreting such analysis. Yet constantly improving computer technology has made statistical demand analysis an increasingly popular approach to forecasting.

Information analysis

Information gathered by the company's marketing information systems often requires more analysis, and sometimes managers may need more help in applying it to marketing problems and decisions. This help may include advanced statistical analysis to learn more about both the relationships within a set of data and their statistical reliability. Such analysis allows managers to go beyond means and standard deviations in the data. In an examination of consumer non-durable goods in the Netherlands, regression analysis gave a model that forecast a brand's market share (B_t) based upon predicted marketing activity:[33]

$$B_t = -7.85 - 1.45P_t + 0.08A_{t-1} + 1.23D_t$$

where

P_t = relative price of brand;
A_{t-1} = advertising share in the previous period; and
D_t = effective store distribution.

This, and models like it, can help answer marketing questions such as:

- What are the chief variables affecting my sales and how important is each one?
- If I raised my price 10 per cent and increased my advertising expenditures 20 per cent, what would happen to sales?
- How much should I spend on advertising?
- What are the best predictors of which consumers are likely to buy my brand versus my competitor's brand?
- What are the best variables for segmenting my market and how many segments exist?

Information analysis might also involve a collection of mathematical models that will help marketers make better decisions. Each model represents some real system, process or outcome. These models can help answer the questions of *what if?* and *which is best?* During the past 30 years, marketing scientists have developed numerous models to help marketing managers make better marketing-mix decisions, design sales territories and sales-call plans, select sites for retail outlets, develop optimal advertising mixes and forecast new-product sales. One implication of the use of mathematical models and other forms of market measurement is their dependencey on the accuracy of data collected.

Since models are looking for a relationship between, say, advertising exposure and sales, the more accurately advertising exposure is measured, the greater will be the advertising impact revealed. For a long time TV ratings were the most accurately measured media

responses, hence skewing expenditure towards TV advertising. More recently, radio and poster advertising have made advances in the measurement of their media responses and grabbed a higher share of advertising spend, so stealing share from commercial TV.[34]

Distributing information

Marketing information has no value until managers use it to make better marketing decisions. The information gathered through marketing intelligence and marketing research must be distributed to the right marketing managers at the right time. Most companies have centralised marketing information systems that provide managers with regular performance reports, intelligence updates, and reports on the results of studies. Managers need these routine reports for making regular planning, implementation and control decisions. But marketing managers may also need non-routine information for special situations and on-the-spot decisions. For example, a sales manager having trouble with a large customer may want a summary of the account's sales and profitability over the past year. Or a retail store manager who has run out of a best-selling product may want to know the current inventory levels in the chain's other stores.

Developments in information technology have caused a revolution in information distribution. With recent advances in computers, software and telecommunications, most companies have decentralised their marketing information systems. In most companies today, marketing managers have direct access to the information network, at any time and from virtually any location.

While working at a home office, in a hotel room, on an aeroplane – any place where they can turn on a laptop computer and phone in – today's managers can obtain information from company databases or outside information services, analyse the information using statistical packages and models, prepare reports using word processing and presentation software, and communicate with others in the network through electronic communications. Such systems offer exciting prospects. They allow managers to get the information they need directly and quickly and to tailor it to their own needs.

International studies

The globalisation of business is extending the task facing managers. Now managers have to manage campaigns across countries and within different countries. International marketing researchers follow the same steps as domestic researchers, from defining the research problem and developing a research plan to interpreting and reporting the results. However, these researchers often face more and different problems. Whereas domestic researchers deal with fairly homogeneous markets within a single country, international researchers deal with markets in many different countries. These different markets often vary dramatically in their levels of economic development, cultures and customs, and buying patterns. Even gathering basic secondary information in many countries is difficult, and primary information can present even more problems. Despite the EU's increased integration and expansion, information gathering across the EU is far from integrated.

In many foreign markets, the international researcher has a difficult time finding good *secondary data*. Whereas many marketing researchers can obtain reliable secondary data on their domestic market, many countries have almost no research services at all. Some international market research firms operate in several large economies, but most countries are not covered by any. Thus, even when secondary information is available, it must usually be

obtained from many different sources on a country-by-country basis, making the information difficult to combine or compare.

Because of the scarcity of good secondary data, international researchers must often collect their own primary data. Here again, researchers face problems not encountered domestically. For example, they may find it difficult simply to develop appropriate samples. Whereas researchers in developed countries can use current telephone directories, census data and any of several sources of socio-economic data to construct samples, such information is lacking or unreliable in many countries. Reaching respondents is often not so easy in other parts of the world. In some countries, very few people have private telephones. In other countries, the postal system is notoriously unreliable. In Brazil, for instance, an estimated 30 per cent of the mail is never delivered. In many developing countries, poor roads and transportation systems make certain areas hard to reach, and personal interviews difficult and expensive.[35]

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

> Translating a questionnaire from one language to another is far from easy . . . Many points are [lost], because many idioms, phrases and statements mean different things in different cultures. A Danish executive observed: 'Check this out by having a different translator put back into English what you've translated from the English. You'll get the shock of your life. I remember [an example in which] "out of sight, out of mind" had become "invisible things are insane".'[36]

Buying roles and consumer decision processes vary greatly from country to country, further complicating international marketing research. Consumers in different countries also vary in their attitudes towards marketing research. People in one country may be very willing to respond, while in other countries non-response can be a difficult problem. For example, custom in some Islamic countries prohibits people from talking with strangers – a researcher simply may not be allowed to speak by phone with women about brand attitudes or buying behaviour. In certain cultures, research questions are often considered too personal. For example, in many Latin American countries, people may feel too embarrassed to talk with researchers about their choice of shampoo, deodorant or other personal-care products. Even when respondents are *willing* to respond, they may not be *able* to because of high functional illiteracy rates. And middle-class people in developing countries often make false claims in order to appear well off. For example, in a study of tea consumption in India, over 70 per cent of middle-income respondents claimed that they used one of several national brands. However, the researchers had good reason to doubt these results – more than 60 per cent of the tea sold in India is unbranded generic tea.

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

Marketing research in small businesses and non-profit organisations

Many of the marketing research techniques discussed in this chapter also can be used by smaller organisations in a less formal manner and at little or no expense. Managers of small businesses and non-profit organisations can obtain good marketing information simply by *observing* things around them. For example, retailers can evaluate new locations by observing vehicle and pedestrian traffic. They can monitor competitor advertising by collecting ads from local media. They can evaluate their customer mix by recording how many and what kinds of customers shop in the store at different times. In addition, many small business managers routinely visit their rivals and socialise with competitors to gain insights.

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

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

Small organisations can obtain most of the secondary data available to large businesses. In addition, many associations, local media, chambers of commerce and government agencies provide special help to small organisations. Local newspapers often provide information on local shoppers and their buying patterns. Finally, small businesses can collect a considerable amount of information at very little cost on the Internet. They can scour competitor and customer websites and use Internet search engines to research specific companies and issues.

In summary, secondary data collection, observation, surveys and experiments can all be used effectively by small organisations with small budgets. Although these informal research methods are less complex and less costly, they must still be conducted carefully. Managers must think carefully about the objectives of the research, formulate questions in advance, recognise the biases introduced by smaller samples and less skilled researchers, and conduct the research systematically.[37]

Facing declining congregations, churches are one of many cash-strapped non-profit organisations that have used market research effectively. Recognising that some churches were bucking the trend of falling and ageing church goers, they researched success factors. Some of the conclusions were simple and inexpensive to implement and not a lot to do with God: 'Be welcoming', 'make the building say "Hello!"' and 'make everybody feel important'.[38]

Market research ethics

Increasing consumer resentment has become a major problem for the research industry. This resentment has led to lower survey response rates in recent years – one study found that 38 per cent of consumers now refuse to be interviewed in an average survey, up dramatically from a decade before. Another study found that 59 per cent of consumers had refused to give

information to a company because they thought it was not really needed or too personal, up from 42 per cent just five years earlier.[39] There are a number of reasons why this resistance to marketing research is rising. Much of the resistance is to do with how market research has been used and abused.

Intrusions on consumer privacy

Some consumers fear that researchers might use sophisticated techniques to probe our deepest feelings and then use this knowledge to manipulate our buying. Others may have been taken in by previous 'research surveys' that actually turned out to be attempts to sell them something. Other consumers confuse legitimate marketing research studies with telemarketing or database development efforts and say 'no' before the interviewer can even begin. Most, however, simply resent the intrusion. They dislike mail or telephone surveys that are too long or too personal or that interrupt them at inconvenient times.[40]

Misuse of research findings

Research studies can be powerful persuasion tools; companies often use study results as claims in their advertising and promotion. Today, however, many research studies appear to be little more than a search for a sales lead. In fact, in some cases, the research surveys appear to have been designed just to produce the intended effect. Few advertisers openly rig their research designs or blatantly misrepresent the findings; most abuses tend to be subtle 'stretches'. Consider the following examples:[41]

A study by DaimlerChrysler contends that Americans overwhelmingly prefer Chrysler to Toyota after test-driving both. However, the study included just 100 people in each of two tests. More importantly, none of the people surveyed owned a foreign car, so they appear to be favourably predisposed to US cars.

A poll sponsored by the disposable diaper industry asked: 'It is estimated that disposable diapers account for less than 2 per cent of the content of landfills. In contrast, beverage containers, third-class mail, and yard waste are estimated to account for about 21 per cent of landfill content. Given this, in your opinion, would it be fair to ban disposable diapers?'. Again, not surprisingly, 84 per cent said no.

In some cases, so-called independent research studies are paid for by companies with an interest in the outcome. For example, four studies compare the environmental effects of using disposable diapers to those of using cloth diapers. The two studies sponsored by the cloth diaper industry conclude that cloth diapers are more environmentally friendly while the other two studies, sponsored by the paper diaper industry, conclude just the opposite. Yet both appear to be correct *given* the underlying assumptions used.

To counter the misuse of marketing research the industry has developed broad standards, such as ESOMAR's International Code of Marketing and Social Research Practice (www.esomar.org). This code outlines researchers' responsibilities to respondents and to the general public. For example, it says that researchers should make their names and addresses available to participants, and it bans companies from representing activities like database compilation or sales and promotional pitches as research. However, many of the pseudo-research practices that damage the reputation of legitimate marketing research are conducted by sales organisations that are not committed to the market research profession.[42]

Summary

A well-designed *marketing information system* (MIS) begins and ends with the user. The MIS first *assesses information needs* by interviewing marketing managers and surveying their decision environment to determine what information is desired, needed and feasible to offer. The MIS next *develops information* and helps managers to use it more effectively. *Internal records* provide information on sales, costs, inventories, cash flows and accounts receivable and payable. Such data are quick and cheap, but must often be adapted for marketing decisions. The *marketing intelligence system* supplies marketing executives with everyday information about developments in the external marketing environment. Intelligence can come from company employees, customers, suppliers and resellers, or from monitoring published reports, conferences, advertisements, competitor actions and other activities in the environment.

Marketing research involves collecting information relevant to a specific marketing problem facing the organisation. Marketing research involves a four-step process. The first step consists of *defining the problem and setting the research objectives*. The objectives may be *exploratory*, *descriptive* or *causal*. The second step consists of developing the *research plan* for collecting data from primary and secondary sources. *Primary data collection* calls for choosing a *research approach* (observation, survey, experiment), choosing a *contact method* (mail, telephone, personal), designing a *sampling plan* (whom to survey, how many to survey and how to choose them), and developing *research instruments* (questionnaire, mechanical). The third step consists of *implementing the marketing research plan* by collecting, processing and analysing the information. The fourth step consists of *interpreting and reporting the findings*. Further information analysis helps marketing managers to apply the information, and provides advanced statistical procedures and models to develop more rigorous findings from the information.

Finally, the marketing information system distributes information gathered from internal sources, marketing intelligence and marketing research to the right managers at the right times. More and more companies are decentralising their information systems through networks that allow managers to have direct access to information. To carry out their responsibilities, marketing managers need measures of current and future market size. We define a *market* as the set of actual and potential consumers of a market offer. Consumers in the market have *interest*, *income* and *access* to the market offer. The marketer has to distinguish various levels of the market, such as the *potential market*, *available market*, *qualified available market*, *served market* and *penetrated market*.

One task is to *estimate current demand*. Marketers can estimate total demand through the chain ratio method, which involves multiplying a base number by successive percentages. For *estimating future demand*, the company can use one or a combination of seven possible forecasting methods, based on what consumers say (*buyers' intentions surveys*, *composite of sales force opinions*, *expert opinion*), what consumers do (*market tests*), or what consumers have done (*time-series analysis*, *leading indicators*, *statistical demand analysis*). The best method to use depends on the purpose of the forecast, the type of product and the availability and reliability of data.

Discussing the issues

1. You are a marketing research supplier, designing and conducting studies for a variety of companies. What is the most important thing you may do to ensure your clients will get their money's worth from your services?
2. Companies often face rapidly changing environments. Can market research information go stale? What issues does a manager face in using these research results?
3. What type of research would be appropriate in the following situations and why?
   - Nestlé wants to investigate the impact of children on their parents' decisions to buy breakfast foods.
   - A college or university bookshop wants to get some insights into how students feel about the shop's merchandise, prices and service.
   - L'Oréal wants to determine whether a new line of deodorants for teenagers will be profitable.
   - Gap is considering where to locate a new store in a fast-growing suburb.
   - Nintendo intends to develop a new range of multimedia products for older children and adults, and wants to test the feasibility of the idea.
4. In market measurement and forecasting, which is the more serious problem: overestimating demand or underestimating it? Give your reasons.
5. What leading indicators might help you predict sales of people carriers? Mobile phones? Baby foods? Describe a general procedure for finding leading indicators of product sales.

Applying the concepts

1. People often make their own judgements about the potential for new products. You may hear someone say a new product will 'never sell' or that it will 'sell like hot cakes'. Recall some recent new products or services that you saw or heard about, and about which you made an informal prediction. What attracted your attention enough to get you to comment on the future of the products or services? What was your forecast? Were you correct?
2. Visit the website www.businessballs.com/demographicclassifications (you will also find the website useful in helping you analyse other marketing problems) and classify yourself and several other people, such as fellow students, on each of the classifications listed.
   - Choose a familiar product and consider how marketing data based on each of the classifications could guide marketing activities. Consider which classification you find most useful and explain why.
   - Examine the divergence of the classification of people in your group and consider whether the differences suggest different marketing plans for the range.
   - These classifications are based on one European country. To what extent could they be applied in another wealthy European country or one of the new east European countries joining the EU?

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Concluding concepts 9
Judy Greene Pottery

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Doing something harder is what Judy Greene has done and continues to do. In fact, Paul, Judy's husband and business partner, likens Judy to the blade on an icebreaker ship. 'Judy has to continually break the ice in developing new ideas. Judy never looks back; she is always looking ahead. Like most artists, her *next* piece is the most important.'

'Younger customers are looking for something Irish, but not hackneyed symbols of shamrocks'.

Judy is a prominent contemporary potter whose company, *Judy Greene Pottery*, is noted for the quality and design of its output as well as the entrepreneurial qualities of its director. Judy Greene is engaged not only in developing products and designs, but also in managing the manufacturing and retail operations of the firm. Judy's business has been successful, experiencing phenomenal growth rates over the last ten years. Her main concern is to ensure its future prosperity.

Judy Greene Pottery

When aged 31, Judy left the Irish pottery company *Potaireacht Cléire* in 1981 to start her own business. She had no business plan, no capital and no time to take business-training classes. So, she put key figures on a sheet of paper and went to see the bank manager. An overdraft of €19,000 was approved. By 1998, sales turnover had reached €1,000,000. Judy's aim was to achieve €1,250,000+ in sales by 2000 and an additional 25 per cent by 2005.

Judy attributes her success, in those years, to having her workshop on the retail site allowing for close, consistent contact with customers. In fact, customers were vital in providing feedback for testing new product ideas. Judy noted that 'if it worked it sold. The customers walking through the workshop were like having a marketing department walking through the door every day.' Judy contemplated what to do next. Her handmade pottery has been extraordinarily successful and she wishes to focus on developing future strategies to ensure continued prosperity.

The Irish market for giftware and crafts

The Irish crafts/gift market had an estimated annual turnover of €127 million. Handcrafted pottery accounted for approximately 9 per cent of that market, giving a per capita expenditure on pottery of less than €2.50. Pottery made in a studio environment (i.e. handcrafted) has 70 per cent of the Irish market, is usually found at the upper price band for tableware and gift items and is not as price sensitive as other product categories. The craft/gift industry had been a growth market for many years. However, there are signs that growth is beginning to slow.

There are several trends which relate to the Irish craft/gift industry overall:

- The young and more travelled customers are moving away from traditional and safe gifts.
- The influence from the tourist industry continues to be strong.
- The healthy economic climate provides a good foundation for opportunities not only for established firms, but also for new entrants.

Customer profiles

Judy's current customers are mostly female, 25 to 45 years of age and older, coming from mostly middle and upper middle incomes. Many of the younger customers (i.e. mid-twenties to mid-thirties) are newly married couples and/or new homeowners. Exhibit 9.1 gives customer segments. Tourists buy in the retail shop and ship their purchases home, perhaps purchasing again later through mail order. Most of these tourist/mail-order sales are made to customers from the US (90 per cent); smaller proportions are made to tourists from the UK (5 per cent), and other countries (5 per cent). Export sales are made through individual retailers who have sought out *Judy Greene* products or through supplying specialist consumer catalogues. The majority of sales are made to retailers in the US (55 per cent); smaller proportions are made to retailers from Canada (15 per cent), France

Exhibit 9.1 Customer segmentation for Judy Greene Pottery for 1998

Market segment	Oct.–March	April–Sept.
Domestic	90%	80%
Export	2%	5%
Tourist	4%	10%
Mail-order	4%	5%
Total	100%	100%

(10 per cent), the UK (10 per cent) and other countries (10 per cent).

Customer trends

Customer trends are changing and their tastes appear to be moving slowly away from pottery back to china, porcelain and cut glass. Most important for Judy is to identify and stay ahead of the trends. To identify trends, Judy 'devours' interior design magazines and travels abroad to Europe and the United States to see what is popular and selling there. 'Typically what is selling in Frankfurt now, will be in Ireland in two years' time.' For this reason, she finds that the timing of new products and designs is crucial. In fact, the idea for one of her best-selling products, oil burners, was developed as a direct result of a trip to a ceramics fair in Munich, five years ago. While in Germany, she went to numerous chemists' shops to examine the design, function and safety features of various kinds of oil burners. It was one of the most cost-efficient ways to do her R&D work. Thus, when she returned to Galway she wasted little time and resources in developing her final product.

Judy readily admits that reading interior design magazines and examining other markets is no guarantee of success in the Irish market, as design and colour trends may not suit Irish tastes. However, identifying the potential trends and then customising them for the consumers in the home market affords a better chance of success. Judy also relies quite heavily on customer feedback. The retailers and customers who buy *Judy Greene Pottery* are always looking for new designs, so Judy has to stay fresh and respond to their feedback. Judy is aware that she needs to capitalise on ideas for new lines to 'stay fresh' in a highly competitive market. Yet, at the same time, she is also knows it is important to stay true to her own style. Balancing these two concerns is challenging while trying to satisfy customer demand.

With respect to design preferences, 10 years ago when Judy started, flowers and flowery designs were 'in'. Now she has to consider what the upcoming generations want, as they will be the customers of the future. The younger age groups are more interested in simpler, more classical lines of design. Judy believes that 'younger customers are looking for something Irish, but not hackneyed symbols of shamrocks and shillelaghs'. In response, Judy introduced her *Connemara Collection* to appeal to the younger markets.

Furthermore, Galway being a tourist town, there are the tastes of visitors to consider. Judy has noticed that the English tourists love the flowery designs and will buy everything in the shop. German visitors prefer the simpler designs and buy the larger, exclusive, unique and one-of-a-kind pottery pieces. The American visitors will be one of two types: either ones that buy 'seconds' from the bargain baskets; or ones who buy entire dinner sets, because they like the design and consider money to be no object. Finally, the French and Italian tourists do not buy a lot of pottery and prefer to purchase items in *Design Concourse Ireland*.

As a member of the Galway Chamber of Commerce, Judy does have access to a research report, *Galway Tourism 1997*. According to this report, there were 920,000 visitors to Galway City in 1996 (see Exhibit 9.2) spending an average of €21.34 on gifts.

Focus group research

Although Judy believed she had a good understanding of her loyal customers, she thought it worthwhile to

Exhibit 9.2 Visitors to Galway City, 1996

Country	Percentage
Ireland and N. Ireland (i.e. other than Galway)	42%
United Kingdom	17%
United States of America	15%
Germany	8%
France	7%
Other Europe	7%
Rest of world	4%
Total	100%

SOURCE: Galway Chamber of Commerce.

investigate various other (potential) customer segments. Her objectives in pursuing this research were to learn more about:

- where people got their ideas for fashion, interior design and home furnishings;
- their general perceptions of porcelain, china, and pottery;
- what brands of pottery they knew, liked, and bought (i.e. for themselves or a gift);
- their buying patterns and criteria when buying pottery.

Judy was interested in qualitative information that explained why people think or feel the way they do and so hired a market research firm to organise and facilitate focus group interviews. The researchers identified four customer types.

Young Graduates – future customers

The average age of participants in this focus group was 23 years. All participants had finished their undergraduate studies. At the time of the interviews, they were in the process of postgraduate studies, or in their first job. None of them owned their own home, and they were living either in the family home or in rented accommodation.

The *Young Graduates* described themselves as being very style and fashion conscious. They were very aware of current fashion trends. In addition, many of them liked to buy branded products and perceived that a good brand name added value to their purchases. Most of their influences came from magazines, shop windows or their peers. However, they also had a clear idea of what they liked and the designs and styles they preferred.

Professionals – higher disposable income customers

The average age of participants in this focus group was 36 years. All participants were homeowners and professional women in a full-time job. The majority of these women were married and had children.

The *Professionals* viewed themselves as very practical individuals who preferred comfort, convenience and simplicity in their surroundings and clothing. Terms such as 'very convenient, no thought involved, easy to manage and maintain, comfortable and practical' were mentioned frequently as important factors for purchases to suit their lifestyle. Many of the *Professionals* expressed that they led busy, hectic lives and sought purchases that made their lives easier.

Homemakers – mature customers

The average age of participants in this focus group was 50 years and they had had their home for a number of years. Many of the women identified themselves as homemakers, although many of them work outside the home, or did so at one time. All the women were married and the majority had children.

The *Homemakers* felt that words such as 'casual, functional, traditional and classical' most accurately described themselves and their preferred surroundings. Influences on their choice of style came from themselves and from magazines, as well as from their friends and relatives. However, they did not believe they were influenced by trends in fashion. Essentially, they had developed their own style and preferred to 'stick with it'.

Loyal Customers – core customer base

The fourth focus group was composed of loyal Judy Greene customers. As this was the only criterion, participants' profiles were more diverse than in the other focus groups. The women ranged in age from 35 to 67 years. All the women had their own home. Most of them were married and many of them had children. Half of the participants were professional women in full-time positions, and ranged in age from 37 to 54 years, while the other half identified themselves as homemakers and ranged in age from 35 to 67 years.

The *Loyal Customers* perceived themselves to be independent thinkers. They did not believe they were heavily influenced by trends in fashion and interior design. In general, they favoured clothing and home furnishings that were 'classical, elegant, and of good quality'. Although they appreciated classical styling, they did not view themselves as traditional. Consequently, they clarified that they preferred 'an old style with a modern twist, and a mix of antique and modern furnishings'. Essentially, they liked 'things that won't date, that are smart, but not too trendy'. Many of these women expressed an opinion that 'fashion was for younger people'. Essentially, they felt they were at a stage in their lives where their identities were established and they were comfortable with themselves.

As a whole, the groups preferred pottery to china and porcelain. Still, each group did have distinct characteristics in terms of motivation for purchase, importance of branding, purchase criteria, and preferences for style, design, colour, etc. Exhibit 9.3 summarises the participants' responses from the focus group interviews.

Exhibit 9.3 Summary of customer profiles

	Focus groups			
	Young Graduates	**Professionals**	**Homemakers**	**Loyal Customers**
Customer segment	Future customers	High disposable income customers	Mature customers	Core customer base
Description of personal style	'Classical casuals'	'Practical minimalist'	'Functional traditionalist'	'Timeless modernist'
Purchase motivations	Brand, style and current trends	Convenience, practicality, functionality and value	Function, personal taste and habit (not by brand and fashion)	Quality, function, consistent with own styles – i.e. timeless, smart, won't date
Perception of current fashion	Retro, 1950s style, tailored, classical casual	Space, efficiency, functionality, bright, airy, timeless, simplistic, minimalist	Natural, wood and earth tones, changes slowly over time	Country style, spacious, airy, more for younger people
Pottery preferred (with respect to style, design, colour, etc.)	Simpler, less fussy designs, in bold colours and shapes – like a lot of variety	Clean, simple lines, in white, natural and terracotta tones	Traditional (terracotta) designs and lines in muted colours	Classical lines with a modern twist, but timeless
Q1: Where do you get ideas for fashion, interior design and home furnishings?	Magazines, peers, shop windows, self, 'what I like'	Magazines, peers, friends, i.e. what others did in their homes	Magazines, out of own head, friends and relatives	Irish magazines, visit the shops, own style
Q2: How do you describe your own style and that of your surroundings (i.e. home or accommodation)?	Own style is casual, easy to maintain, comfortable; style, brand and quality conscious, very fashion conscious, very aware of trends	Practical, comfortable, focused, minimalist, simple, convenient, consistent	Casual, functional, individualistic, not too concerned about fashion	Classical, good quality, elegant, independent thinkers, smart styles, not too trendy or dated, old-style with a modern twist
Q3: Words you associate with china and porcelain?	Formal, dainty, dust-collectors, old-fashioned, out of date	Too outdated, costly, expensive, fussy, delicate, irritating	Dainty, impractical, unused, flowery, expensive, not for everyday use	Delicate, lovely, pretty, formal dining room, formal, never used
Q4: Words you associate with pottery?	Earthy, natural, raw/unaffected, in fashion	Functional, chunky, durable, heavy	Chunky, practical, functional, old-fashioned	Warm, earthy, comforting, casual, intimate
Q5: What are important factors when buying pottery?	Colour, shape, design, texture, depends on occasion	Occasion (gift) recipient's taste and preferences, look and design, function, and price	Practicality, function, shape, colour, simplicity, design, style	Shape, colour, functionality

Exhibit 9.3 continued

Exhibit 9.3 (cont'd)

	Focus groups			
	Young Graduates	Professionals	Homemakers	Loyal Customers
Q6: What brands of pottery are you most familiar with (i.e. name recognition)?	Stephen Pearce, Judy Greene, and to lesser extent Nicholas Mosse, Michael Kennedy	Stephen Pearce, Judy Greene and to a lesser extent Nicholas Mosse	Stephen Pearce, Judy Greene and Nicholas Mosse	Stephen Pearce, Jack O'Patsy, Judy Greene, Louis Mulcahy and Nicholas Mosse
Q7: How important is the brand (name) in general and when purchasing pottery?	Very brand and style conscious	Brand not a big issue – more emphasis on function, convenience, comfort, price–value relationship	Brand name is not important	Appreciate value of brand, but brand name is more important for gifts
Q8: How important is price when purchasing pottery?	Brand carries (a lot) more importance, but they also look at price carefully	Value conscious more than price conscious	Price is not very important	Price is not at all important
Q9: How important is in-store service?	Very important	Convenience is very important	Important part of the purchase experience	Extremely important

Questions

1. Classify the types of marketing research used by Judy Greene over her firm's evolution.
2. What market research would you suggest that Judy Greene should have done before starting up her business?
3. To what extent did the qualitative research reported fulfil Judy Greene's research objectives?
4. Based on the research conducted so far, what recommendations would you make to Judy Greene concerning the way ahead for her company?
5. What further research would you recommend she does?

*Based on Ann M. Torres' comprehensive case 'Judy Greene Pottery: Marketing Irish Handcrafted Products', 1999.