Chapter 4

An Introduction to Research Methodologies

Introduction

In this chapter you will learn about:

- Where you can use desk research and the most important sources of secondary data.
- The application of quantitative research in measuring consumers' use of products, their attitudes to products, the launch of new products, setting prices and evaluating promotions.
- The tools that are used by market researchers to collect data including face to face interviews, telephone interviews, self-completion questionnaires, focus groups, depth interviews, hall tests, and observation.

Key sources and uses of secondary data

Desk research refers to secondary data or that which can be collected without fieldwork. To most people it suggests published reports and statistics and these are certainly important sources. In the context of this chapter the term is widened to include all sources of information that do not involve a field survey. This most certainly will include searching libraries and the internet but it could also include speaking to someone at a trade association or carrying out interviews with experts.

Desk research is used by market researchers for the following tasks:

Market sizing – using official statistics or calculating the market size from algorithms based on population or other basic data such as the Gross Domestic Product (GDP) of a country or its electricity production.

Trends – based on time series of statistics or commentary in the press

Company profiling – used to build a picture of customers or competitors covering issues such as their size, the products they sell, the geographies they operate in, their financial performance and their investment intentions

Products – considerable detail can be obtained from web sites showing their features and performance characteristics

Prices – in many markets the prices of products are published and can be obtained from official price lists or web sites

Distribution – articles and commentaries show how products get through the value chain as they are changed from raw materials to finished goods

Promotions – adverts in journals and web sites show how companies promote their products.

The sources of desk research which are commonly used are:

Figure 4.1 Common Sources Of Published Information (Desk Research)

Source	Information That Can Be Obtained From The Source
Internal data within organizations	Customer lists; sales figures; trends of sales over time; enquiries; sources of enquiries; complaints; sales representatives' reports; market reports on the company's shelves; information in people's heads
Libraries	Journals; newspapers; directories; clippings; reports; government statistics; EU statistics; industry statistics; atlases; dictionaries; books on products and processes
Trade associations	Industry statistics; lists of members; technical papers; reports; informed opinion

Government departments	Official statistics on output, population, and employment; white papers; monopolies and mergers reports; census data and lists; country reports; export and import data
Exhibitions	Directories of companies exhibiting; brochures and catalogues from exhibitors; access to stands to see equipment and talk to staff
On-line databases	Such as Dialog DataStar or Reuters for articles, reports and company information
Internet	Company web sites for product and company information; articles; access to market research reports (or at least abstracts from them); lists of companies; government statistics; population statistics;

Internal sources

The ordering of the sources in the above table deliberately starts with "internal data" and ends with the internet as a reminder that we are often guilty of forgetting the first source and always turning to the last.

It is worth emphasizing how much useful information often sits in the desks and on the shelves of the very companies that are seeking that data. This information could be in old reports or in sales or market statistics which, with a bit of imagination, could be reworked to produce a valuable picture.

Sources of sources

Researchers should be familiar with "sources of sources". These range from inexpensive books such as How to Find Information – Business: A Guide to Searching in Published Sources (How to Find Series) by Nigel Spencer (available from amazon.com) through to the much more expensive Croner's A-Z of Business Information Sources (this lists some of the best web sources and is available on CD-ROM).

There are also other general guides that can be used to track down sources of data including those covering published research, the press, directories and statistics examples of all of these have been mentioned above. For international markets there are comparable 'sources of sources' including *European Directory of Marketing Information Sources* and *Directory of International Sources of Business Information*.

There are a number of handbooks of marketing information that should always within arms reach of the researcher. My favourite is the *Pocket Book* series from the Advertising Association. These include:

- The Marketing Pocket Book
- The European Marketing Pocket Book
- The Media Pocket Book
- The Lifestyle Pocket Book
- The Regional Marketing Pocket Book

These little tomes cost less than £30 each and contain vast amounts of economic and demographic data on the consumer and the media.

Good web sites for researchers

There are an increasing number of web sites that offer archive material to researchers without having to sign up though there usually is a fee for the report or part of it. The table of contents is available free and there are many synopses of reports, which may be sufficient for those requiring just an overview. The charges made for bought-in reports and similar sources range from the nominal up to levels comparable to commissioning *ad hoc* research. Most fall within the \$500 to \$5,000 bracket.

A good source of market research data, offering full or part reports is www.marketresearch.com which allows access to a collection of over 50,000 publications from over 350 research firms.

One of the best general databases of commercial and financial news is ft.com – the Financial Times' web site.

The United States has led the world in the collection and dissemination of business information for many years. The Central Intelligence Agency brings together basic intelligence which began as the National Intelligence Survey and is now an on-line *Factbook* that can be very easily examined country by country (www.cia.gov/cia/publications/factbook/). The Factfile gives geographical statistics on countries, the demographic breakdown of

their population, economic overviews (in some detail), transportation, government, and maps galore. Another route to similar information is www.geographic.org.

Company data

Directories are the staple diet of market researchers. They provide details of companies that either supply or consume goods and they are the usual source for preparing sample frames (list of companies or people to be interviewed).

One of the most comprehensive general directories is *Yellow Pages* (www.yellowpages.com in the US and www.yell.com in the UK) since every company with a telephone number is given a free entry. These directories form the most comprehensive listing of small and medium enterprises (SMEs). For example, within the Yell Group, The Business Database supplies data on around 1.5 million UK businesses sourced from the free-line entries in the Yellow Pages printed directories. From its web site it is possible to run counts of companies and download lists for sample frames.

Other general directories, which comprise larger companies than those in Yellow Pages, include *Kompass* and *Dun & Bradstreet's Key British Enterprises*. As well as these general sources, most industries have their own specialised directories, which may have a better listing of suppliers and buyers.

Financial data on companies is available in the UK from Companies House (www.companieshouse.gov.uk). Companies House's website offers a searchable index which gives access to information on more than 1.5 million companies. Of these about 11,000 are public companies (PLCs) which issue shares and of the PLCs, about 7,000 are quoted on the Stock Exchange. Smaller companies file only limited information and this can reduce the value of company accounts in niche markets.

Government statistics

In most projects, the desk researcher will seek 'hard' statistical data and sooner or later this will point towards a government source. These cover most areas of business and social life.

In the UK, The National Statistics website (www.statistics.gov.uk) contains a vast range of official UK statistics which can be accessed and downloaded free. The site allows searching by themes such as agriculture/fishing/forestry, commerce, energy, industry, education, crime and justice, the labour market, the population etc

In the US the Census Bureau <u>www.census.gov</u> has a site covering every aspect of the population, including all key demographics such as age, education, labor, computer ownership and use, income (to list but a few subjects). Marketeers use census output for segmentation by demographics and survey planning (eg setting quota samples).

A visit to US Department Of Commerce site on www.commerce.gov offers vast amounts of information from industry sector statistics to economic analysis to demographic data, and research publications. There is a good search engine to help navigate through this very large site.

Key point

Market researchers need to be familiar with the many sources of secondary data. There are thousands of these and they are changing all the time. Market researchers should not feel they need to hold lots of information in their heads but they should know where to look to find that information.

There are also international bodies collecting and publishing statistics. For the European Union, the office responsible is *Eurostat* and this source will increasingly be important in projects covering the whole single market of the EU (www.europa.eu.int/comm/eurostat). Two other major publishers are the United Nations (*UN*) and the Organisation for Economic Cooperation and Development (*OECD*).

Trade and industry bodies

Every trade, no matter how obscure, nearly always has some collective body to represent its interests and also usually spawn several trade publications. To meet members' needs, and for PR purposes, most of these bodies publish or can make available (sometimes to members only) considerable information about their

industry. The organisation and sophistication of these bodies and the volume of the information offered varies enormously. In Europe, the best source for associations is CBD who publish directories on various British and European organisations (www.cbdresearch.com).

Market research reports

A number of specialist market research companies speculatively carry out studies, which are then sold as publications. Compared to privately commissioned studies these are incredibly good value. Often referred to as *multi-client* reports, these publications cover every subject imaginable from A to Z. There are over 30,000 multi-client reports available and they can be located through several sources. *Marketsearch* lists 20,000 published reports from 700 firms. The database can be searched in hard copy or from the company's web site (www.marketsearch-dir.com). Another directory of published market research is findex (www.findexonline.com) which published over 10,000 off the shelf reports on world markets.

The press

The general, business and trade press are key sources for the desk researcher. As well as 'news', these sources include much background material, including special supplements on industries and markets. In the past, researchers relied on the clippings services of libraries and archive agencies but today's work is made easier by on line search facilities on some newspaper sites. The best has to be the UK's Financial Times (www.ft.com) which has an archive facility available to everybody for simple searches and "power" searches of a wider archive for a reasonable fee.

Think about

What would be the value to your senior managers of alerts on intelligence relevant to your markets? What desk sources could you tap for those alerts? Set up a file of your favourite sources including web sites, phone numbers of trade associations and libraries.

The key uses of primary research

Primary research collects data specifically for the purpose of that survey. Each survey therefore is based on raw data, usually from interviews, that is unique. The surveys can be designed to answer almost all marketing problems and to provide insights into all marketing subjects. The most common are:

Understanding market size and brand shares

Market size data is often obtained from secondary data and desk research. However, primary research can be used to make estimates of market size if there are no published figures. The market size would be calculated by collecting data from consumers on their use of products and services and the volume and frequency of their purchases. Using this data together with population statistics, estimates can be made of the overall market size for those products or services. Take for example the Philips/Softone case study discussed in chapter 3. Research in this study established that 79% of people who saw the new light bulb at a hall test were interested in the new product. This would represent 35 million people with an interest in the bulb out of the 45 million adults in the UK. The researcher could now play "what if" games with these figures. For example, what if just 10% of this number bought at least one Softone bulb per year at a retail price of £1, what would that mean in revenue to the company?

For many consumer goods, market sizes are calculated from retail audits. The researchers collect data from a representative panel of shops that sell the products. Details are taken of the sales and stocks at the shops every month or two months providing estimates of sales that can be projected for the total universe. These calculations would also show the brand shares of the key products.

If the market size data is collected over a period of time it provides trends of the overall sales and of brand shares.

Consumer perceptions and behaviour

Primary research is carried out to establish consumers' use of and attitudes to products and brands. Typically researchers test the awareness of brands (unprompted and then prompted) and then determine which products are ever used and which are used most of the time. This shows consumers' loyalty to brands and their switching behaviour.

Consumers build up prejudices and beliefs about products and services that affect their purchasing habits. Researchers test these opinions and attitudes in primary research to show what attributes are considered to be important in driving the selection of a brand and how brands rate on those attributes. Customer satisfaction surveys are based on this type of questioning.

The needs that drive the selection of a supplier can be established in primary research and this is vital intelligence influencing the design of products and the messages that are used to promote products.

Cluster analysis can be used to group consumers according to these needs. This provides a needs-based segmentation that allows the supplier to offer different value propositions to meet the different needs.

Product development

A significant amount of market research (over a quarter) is spent on developing new products. Primary research may test attitudes to existing products to establish in what way they are lacking and then test improved and modified products to see if they better meet consumers' needs. This research can be carried out in a variety of ways including in focus groups, in hall tests and in home tests.

Pricing

One of the best methods of establishing what people will pay for a product is a test market in which the product is offered in a real competitive environment with controls to see the different effects of prices.

Test markets are expensive to set up and control and so primary research is used to obtain views on the optimum prices for products and services. This type of research can range from very simple questions that ask people's likelihood to buy at a certain price through to more sophisticated approaches using trade-off (conjoint) analysis. Conjoint analysis asks respondents to rank a number of contrasting combinations of attributes that represent the concepts for the new product. The ranking enables the software to calculate utility values for each attribute, indicating a measure of the desirability of the different combinations.

Promotions and branding

A significant amount of primary research is devoted to finding out how promotions can be made to work harder. Qualitative research is used to explore the motivations that drive buying decisions and these become the messages in the promotions. Qualitative research is also used to test advertising concepts and draft campaigns to establish which will be most effective or how they can be tuned to greater effect.

Quantitative research is used to measure awareness levels of brands and to find out how that awareness has been built up (a most difficult task). Media research checks on the newspapers and journals that people read and the programmes they watch and listen to.

People are often reluctant to admit to the influence of promotions or the power of brands in influencing their purchasing decisions. Primary research is used to find out how brands are perceived and what are considered to be their values.

Think about

Where could primary research help your organization improve the efficiency of its products, its prices, its promotions or its place (route to market)? How could it help make improvements in customer satisfaction? How could it help in a better positioning of your brand or your products? How could it be used to improve the way you segment your customers?

The methods of data collection

When most people think of market research methods, they inevitably think of questionnaires. Questionnaires are certainly an important means by which we capture responses from people and they can be administered face to face, over the telephone or they can be self-completion. There are, however, a range of other tools that researchers can use and each has its part to play in survey work. The seven tools that are most used are shown in Figure 4.2.

Telephone interviews

Self-completion questionnaires

Research Methods

Desk research

Hall tests & clinics

Focus groups & depth interviews

Figure 4.2 The Tools In The Market Researcher's Tool Bag

Face to face interviews

Face-to-face interviews have traditionally been the favoured method for collecting information from the general public though they are fast losing out to the telephone. Today there are still 3.7 million face to face interviews carried out every year in the UK 3 – just about equal to the number of telephone interviews. In the UK interviews with the general public are often carried out in the home or in the street (some are also carried out in airports, in places of

work and other places) whereas in the US they are conducted in the safer environment of a shopping mall.

Street interviewing is appropriate if the questionnaire is short and simple. Using a short questionnaire, and assuming that the questions are applicable for most of the passers-by, an interviewer can achieve 30 and sometimes more interviews in a day. Because a large number of interviews can be carried out in a day, they are quicker, easier and cheaper than interviews is homes.

Interviewing in the street is not always possible, especially where the questionnaire is long and complicated. It is difficult to show visuals or prompt cards in a street interview. Respondents may be caught in poor light; the weather could be inclement and, if the shopper's hands are full, show cards are difficult to use. Nor is the street the best place to find a good cross section of the population as many are at their offices or factories while others may keep away from the busy city centre sites where interviewers work.

Paper questionnaires are still used in the street but in a home interview it is more likely that the questions will be on a lap top computer and responses tapped in as they are received. This is computer aided personal interviewing (CAPI) and it now accounts for 30% of all face to face interviews. It speeds up the interviews as responses are a simple matter of entering a numeric code and routing is automatic. At the end of the interviewer's working day the completed interviews are e-mailed to the research agency's computer. Transmission is safer, much quicker and less costly than the post.

CAPI interviewing has necessitated a considerable investment in expensive technology for large field forces and required training in computer and typing skills for the interviewers.

Telephone interviews

The telephone has grown in importance as an interview method, fuelled by the advantages of greater speed, convenience and lower costs than face to face interviews. In the same way that computers are replacing the clip board and questionnaire in face-to-face fieldwork, so too they are taking over in telephone interviews. Interviews carried out by telephone are guided by a questionnaire displayed on the screen of a computer. The interviewer keys in answers as they are received and they are free to concentrate on the interview itself as the routing is automatic depending on the response. Computer aided telephone interviewing (CATI) has the advantage of automatically managing the quotas for different

groups of respondents. Because the extra task of data processing is eliminated, there are fewer data entry errors and costs are reduced. CATI interviewing now accounts for 60% of all telephone interviews carried out in the UK⁴.

Self-completion questionnaires

Self-completion questionnaires face us everywhere we go. They sit in our hotel rooms. They are thrust at us in airports. They drop through the mail box. Many researchers distrust this method because they suffer from low and uncertain response rates. However, they are widely used where there is a strong relationship with a target audience, such as in employee satisfaction surveys, in which case response rates can exceed 70%. If there is a strong relationship between a supplier and customer, a self-completion questionnaire may be appropriate and get a high response. They are often used to collect information from the medical profession, who are also motivated to respond by a large financial incentive.

Self completion surveys have their advantages. They are an ideal tool for the solo researcher as there is no requirement for a field force of interviewers. They are best suited to surveys with lots of rating scales which would be tedious in an administered interview. However, they do not allow the controlled questioning or the probing that is possible in an administered interview.

In business to business research, web based surveys are now common place as most business respondents have easy access to a computer. Web based surveys are also growing in popularity in the US where large numbers of the general public are persuaded to provide detailed personal data on themselves and their families and take part in regular surveys for a financial incentive. Using the personal data, research companies can select closely targeted groups of respondents to take part in surveys on almost any subject.

Observation

Observation was one of the first market research tools used, favoured because it was believed to be honest and non-intrusive. Prior to the Second World War, the British government sponsored the "Mass Observation Project" to provide an anthropology of the nation. During the War this was extended to include a national panel of volunteers who kept diaries to track the mood of the war beleaguered country using trained observers. They sat in pubs, watching and listening. They stood at bus stops and listened. They

later captured their observations in diaries ready for analysis. A legacy of this approach is in the title of the market research agency, Mass Observation, which lived for around 30 years until being subsumed within a larger group. Its modern day equivalent in Tokyo is Video Research Ltd, one of the largest market research companies in the country whose title gives us a clue as to the tool kit it used in its early years.

Observation plays an important part in mystery shopping where the fieldworker plays the role of a member of the public buying or enquiring about the product and they record the experience in as much detail as possible on a questionnaire (usually at a later time so as not to be obvious). This is common practice in checking on service levels in hotels, restaurants and car dealers.

A key part of any shopping study is the measurement of footfall – that is the number of people passing an outlet or an advertising hoarding. Observation is an obvious means of recording shopping traffic and it can be measured by fieldworkers counting heads (rather than keep a head count they are likely to use "clickers" which are simple mechanical counters that are activated by squeezing/clicking the device). Equally, the footfall may be measured electronically using optical scanners (more difficult than you might think in a busy thoroughfare with people not always walking in an orderly way).

Observation also plays an obvious role in shopping surveys where a researcher can easily walk into a store to see if products are in stock and check their ticketed price. The technique is sometimes extended to include observation by video camera, capturing the behaviour of shoppers as they make their purchases.

Finally, audits are carried out without interviews – using observation. No longer are physical counts made of the products on the shelves or in stock. This is carried out electronically at the point of sale (EPOS) and the data is downloaded from here to the computers of the market research company.

Hall tests and clinics

Hall tests are used when it is necessary to obtain the reactions of people to a product or concept which it is impractical to take to homes or into the street. For example, food and drink products need to be carefully prepared and presented at the right temperature and in the right conditions if a fair reaction is to be obtained.

Hall tests are so named because they involve hiring a suitable hall or venue close to a busy shopping centre. This contrasts with the US where special facilities in shopping malls are owned by research companies and hired out to other research agencies, together with interviewers. Such special facilities are becoming increasingly available throughout Europe.

At a typical hall test, half a dozen interviewers recruit people from the busy mall or streets and persuade them to come to the venue where they can taste or comment on the product. The number of interviews that can be completed in a day depends on the screening criteria for respondents and the length of the interview. If 50 people per day are interviewed, the test would probably run for three or four days to achieve a large enough sample to be statistically robust. The tests may be carried out in different cities to overcome regional bias.

Central to the purpose of holding a hall test is the need to *show* something to respondents. Usually this is a product, and hall tests and product testing are often regarded as synonymous. Hall tests are also used to test packs and advertising material.

"Clinics" refer to a similar method though the term is used most frequently by car companies who show their new models to prospective purchases in carefully controlled, clinical conditions.

Focus groups and depth interviews

Key point

Market research
problems are often
best answered by
using a variety of
research methods,
each method playing
to its strength.

Focus groups are the most widely used qualitative research technique in Europe and the US. A group comprises 6 to 10 respondents are led by a facilitators or moderator through a discussion which runs with considerable freedom so that ideas get bounced around and developed. In this way, insights are obtained that may not have come from one to one interviews. Focus groups are normally held in special viewing centres which allow the research sponsors to view the proceedings. The discussions last up to

two hours and are video taped.

It is normal to carry out three or four focus groups to cover for the possibility that one of the groups could have been swayed by a dominant respondent or failed to gel and generate sufficient ideas.

Another important qualitative research technique is the depth interview. The term `depth' or `in-depth' implies that the interview is longer rather than shorter, unstructured rather than structured and face-to-face rather than over the telephone. Because the subject is covered in depth, there is a suggestion that the interviewer digs deeper for answers, talks more freely and so the true facts, perceptions and motivations are discovered. Very often the interview is tape recorded rather than written down on a questionnaire.

Depth interviews are used where it is important that there is no `contamination' of respondents' views one with the others, as happens in group discussions. Also, depths may be preferable to groups when the subject is highly sensitive because it is about sexual practices, personal hygiene or financial planning.

Think about

Your Board is considering allocating (or not) a market research budget for next year's business plan. You are asked to make a brief presentation in which you will say how market research could benefit your organisation and which tools are likely to be needed to carry out this research. What would you recommend was researched and which tools would you suggest for carrying out this work?

Desk research

Desk research is the collection of secondary data from internal sources, the internet, libraries, trade associations, government agencies, and published reports. It is frequently carried out at the beginning of a study as a stage-gate to see if more costly primary research is justified. Key sources and uses of secondary research are discussed at the beginning of this chapter.

SCARY STORY

Some years ago a market research company was commissioned to carry out a survey of the world market for tunnelling equipment. In the course of the study the researchers flew thousands of miles and interviewed dozens of people. It was a very expensive piece of research.

At one of the interviews, towards the end of the project, a question from the researcher prompted the respondent to reach behind him and pick a book off his shelf.

"I suppose you have seen this", he said.

It was a directory of all the worlds' tunnels listing their length, when they were built and how they had been constructed.

If the researchers had carried out desk research before the survey, they could have saved thousands of pounds in fee, completed the job quicker and it would have been more accurate.