CHAPTER OBJECTIVES
After reading this chapter you will be able to:

- Distinguish between descriptive and analytical surveys.
- Describe and apply different approaches to both analytical and descriptive surveys.
- Select alternative survey data collection methods.
- Implement special approaches to maximize response rates to organizational surveys.
- Take steps to counteract some of the limitations of survey design.

In this chapter, we examine surveys, today one of the most popular methodologies and widely used in the business and commercial worlds. Surveys are described by Fink (2002b) as a system for collecting information to describe, compare, or explain knowledge, attitudes and behaviour. They are a common methodology in research because they allow for the collection of significant amounts of data from a sizeable population. But many surveys go further than this, looking for associations between social, economic and psychological variables and behaviour. Market researchers, for example, may be interested in how changes in income level and status affect people's spending patterns. The results of surveys, whether commissioned by organizations, companies or the government, are frequently quoted in the media. Most surveys are conducted using a
WHAT IS A SURVEY?

According to Sapsford (2006), a survey is a detailed and quantified description of a population – a precise map or a precise measurement of potential. Surveys involve the systematic collecting of data, whether this be by interview, questionnaire or observation methods, so at the very heart of surveys lies the importance of standardization. Precise samples are selected for surveying, and attempts are made to standardize and eliminate errors from survey data gathering tools. The very first survey, the Doomsday Book of 1085, was largely an exercise in counting (people, ownership of land and livestock, etc.) but modern surveys are usually exercises in measurement (often of attitudes). They attempt to identify something about a population, that is, a set of objects about which we wish to make generalizations. A population is frequently a set of people, but organizations, institutions or even countries can comprise the unit of analysis. Since populations often tend to be fairly large, and therefore time-consuming and expensive to survey, we tend to collect data from samples, as we saw in Chapter 6, a portion or subset of the population.

Conducting surveys is now a thriving business, and being on the receiving end of surveys is often a component of modern life. Companies make use of surveys to measure customer attitudes towards their products and services. Educational establishments survey (evaluate) student opinions about courses and programmes as part of their quality assurance processes. Governments and politicians pay close attention to surveys of public opinion to gauge the mood of the populace on issues such as transport, education, health, the environment, and, of course, voting intentions. For example, in 1982 the
Policy Study Institute obtained UK government funding for a national survey of ethnic minorities, using a sample of 5,000 adults (Hakim, 2000). The survey considered the extent and causes of 'racial disadvantage' in relation to residential segregation, housing, education, employment and healthcare.

A particular form of survey, a census, is a study of every member of a given population and the Census is an official survey of a country's entire population—in the case of the UK, one that is carried out every 10 years. A census provides essential data for government policy makers and planners, but is also useful, for example, to businesses that want to know about trends in consumer behaviour—such as ownership of durable goods, and demand for services.

An increasingly common focus of surveys is employees' attitudes. Hartley (2001) reports research showing that in the USA employee surveys are becoming an integral part of human resources strategy. In the UK, in large firms employing over 5,000 people, nearly half have reported using employee surveys. Surveys, then, have moved from being used as barometers of attitudes and opinions, to constituting essential links to business strategy and organizational change.

**TYPES OF SURVEY**

As we have seen, surveys fall into two broad categories: descriptive and analytical.

**DESCRIPTIVE SURVEYS**

Descriptive surveys are designed to measure the characteristics of a particular population, either at a fixed point in time, or comparatively over time. They are designed to measure what occurred, rather than why. Descriptive surveys are used in a wide range of areas such as market research, public opinion polling, voting intention surveys and media research (ratings surveys). Surveys of this kind have often been used to identify the scale and nature of social problems, including poverty, crime and health-related issues. Hence, descriptive surveys can be the source and stimulus for policy changes and social action.

**Characteristics of descriptive surveys**

While, generally, inductive in approach, it would be entirely wrong to assume that descriptive surveys are devoid of theory. Indeed, reference to relevant theories may be necessary before the research can be formulated. De Vaus (2002) goes further, arguing that good description is the basis of sound theory. Unless something is described accurately and thoroughly, it cannot be explained. Illuminating descriptions can highlight puzzles that need to be solved, and thus
provide the inspiration for the construction of theories. Furthermore, the identification of problems can provide the cornerstone for action.

Descriptive surveys are often undertaken to ascertain attitudes, values and opinions. For example, a survey might examine staff views about whether the organization's customers seem content with the service they are receiving. Indeed, the working practices of organizations would be a typical subject for descriptive surveys. But as Black (1993) notes, there may be differences between the opinions found through a survey, which is a description of people's perceptions, and the actual reality of practice. In other words, people may articulate a particular view, but in practice behave differently. Hence, caution needs to be exercised in drawing conclusions from such surveys.

**Mass descriptive surveys: the opinion poll**

In modern, democratic societies, one particular type of descriptive survey, the opinion poll, has become an essential arm of the government policy-making process. Sometimes large corporations also commission their own surveys to check on shifting public priorities and attitudes that could influence government initiatives (Ferguson, 2000). The following Case Study, however, shows how difficult it is for opinion polls to make accurate predictions.

**CASE STUDY 9.1 SURVEY LESSONS FROM US OPINION POLLS**

Should we trust opinion polls? The track record is patchy because signs that the methods used are failing can be ignored until disaster strikes – like calling the wrong winner in an election! This happened to the *Literary Digest* in 1936. The magazine had been polling since 1916 and getting its predictions acceptably close. In 1932, for example, it predicted Roosevelt's victory within a fraction of a percentage point. But in 1936 it predicted a victory for Alfred Landon when Roosevelt won again. So what went wrong?

The problem was that the *Literary Digest* accessed its sample by using telephone directories and car registrations. But Roosevelt's New Deal coalition had brought minority groups, such as Southern farmers and organized labour, towards his Democratic Party. But these were precisely the kinds of groups under-represented in terms of telephone and car ownership.

(Cont’d)
The next major polling crisis came in 1948 when they failed to predict the victory of Harry Truman. Statisticians later found that the polls had stopped asking questions too soon. Many people switched their votes at the last minute, largely due to Truman's effective campaigning. After this, the polls stayed in the field longer. They also replaced quota sampling with probability sampling, meaning that respondents were chosen purely on chance. Polling accuracy improved dramatically, and was further improved in the 1970s with the introduction of telephone polling. This was cheaper and therefore allowed for much greater sample sizes (and therefore purer samples).

But in the 1990s the average error (the difference between the final pre-election poll and the winner's vote) rose to over 3 per cent. Why the rise? Well, a major factor must be the problem of public resistance to telephone interviewing, probably as a result of being burdened with too many junk phone calls. People are wary of strangers calling at inconvenient times.

One result of this has been a growing interest in Net polling. The problem here, of course, is that not everyone is linked to the Internet. The polls try to get around this by giving more weight in the survey to those Internet users who are most like (in key variables such as social groups) non-Internet users. In the 2000 US presidential election some of these Net polls were predicting a win for Gore. Back to the drawing board!

Source: Adapted from Meyer, 2000

ON THE WEB 9.1

Go to Qb: Survey Questionnaires at:
http://qb.soc.surrey.ac.uk/docs/surveys.htm

Explore the wide range of surveys including:
- British Election Surveys
- Family Expenditure Surveys
- Labour Force Surveys

Pay particular attention to the Overview section for each survey, explaining the aims and methodology of the survey.

Now take a look at:
http://www.yougov.com
Pay particular attention to the sampling methods. To what extent do you think they could be justified as representative?

**From descriptive to analytical surveys**

Often, descriptive surveys might only be the precursor to more detailed analytical studies. For instance, a descriptive survey of UK management attitudes towards sterling currency integration with Europe might reveal the strength of feelings one way or another. But we might quickly come face-to-face with the 'so what?' question. If a trend or attitude has been described, what caused it? As Saunders et al. (2007) make clear, descriptive studies in business and management research have their place, but they are generally a means to an end rather than an end in themselves.

In practice, what determines whether a survey is analytical or descriptive is often the size of the sample. If the sample is relatively small, and the research deals with relationships between multiple variables, it is unlikely that any associations found will be statistically significant. In these circumstances, an analytical survey would be of little value so the survey will be largely descriptive.

**TOP TIP 9.1**

If you are about to undertake a survey, say as part of a dissertation or project, go to your research questions. Is your focus mainly on 'What is happening?'. If so, ask yourself (or your supervisor) whether you should also be asking 'How' or 'Why' type questions.

**ANALYTICAL SURVEYS**

As has been pointed out, analytical surveys attempt to test a theory in the field, their main purpose being to explore and test associations between variables. As Oppenheim (1992) shows, analytical surveys take on typical characteristics of experimental research when it comes to dealing with these variables. As was shown in Chapter 6, the survey will have to distinguish between:

- **Dependent** variables – the subject of the research, the gains or losses produced by the impact of the research study.
- **Independent** variables – the ‘causes’ of the changes in the dependent variables that will be manipulated or observed, then measured by the analytical survey.
- **Uncontrolled** variables – including error variables that may confound the results of the study. It is hoped that such variables are randomly distributed so any confounding effects are limited.
Controlling extraneous variables can be achieved in a number of ways through careful planning of the survey. They can be controlled, for example, through exclusion (such as only using females in the study so as to eliminate the possible confounding effects of gender). Variables can also be controlled by holding them constant (for example, by interviewing respondents on the same day so as to eliminate the effects of time). Randomizing can also assist in controlling extraneous variables, since, if the sample is truly random, any extraneous variables should, in all probability, be represented in the sample in the same proportions as in the population being studied.
ON THE WEB 9.2
Take a look at the website for the NOP Research Group at:
http://www.nop.org.uk
Examine some of the surveys conducted. Pay special attention to the size of
some of the samples used. Can you pick out any particular designs such as
longitudinal or cross-sectional?

STAGES IN THE SURVEY PROCESS
Before conducting a survey it is essential to understand the phases and steps
involved. Conducting a survey is much more than just a process of designing a
questionnaire and collecting data. Czaja and Blair (2005) suggest a five-stage
process (see Figure 9.1).

STAGE 1: SURVEY DESIGN AND PRELIMINARY PLANNING
As with most research strategies, the first step involves the specification of the
central research questions that the survey needs to address. These might be artic-
ulated in a number of different ways, for example:

- A hypothesis: Industrial workers are more likely to favour ‘blood sports’ than service-
  sector workers.
- A causal hypothesis: People who like classical music are more likely to visit art
galleries.
- A description: What proportion of people believe that all first-time offenders should
  be jailed?

Some research questions may focus on the views or actions of individuals,
others on groups, organizations, networks or businesses. In formulating research
questions it is important that they achieve a sense of specificity and focus. De
Vaus (2002) suggests that this can be achieved by asking the following questions:

- What is the time frame for the survey? Do we need to know about the issue now, in
  the past, or do we need to project trends into the future?
- What is the geographical location of the research? Is it local, regional, national or
  international?
- Is the focus of the research broad and general, or does it need to compare and specify
  patterns among sub-groups? For example, in looking at absence levels in a country,
  are we also interested in a breakdown of data by region, sector, industry or gender?
• What aspect of the topic is of interest? If, for example, the research issue is e-commerce, are we interested in trends in its growth, companies who do (and who do not) use e-commerce and why, or what kinds of software platform firms are building the e-commerce Web system on?

• How abstract is the research interest? Is the main focus of the research on the gathering of raw data, say, the sale of expensive consumer durables, or what this might reveal about general consumer confidence and standards of living?

In writing research questions for surveys, it is important to establish the research’s frame of reference. Hence, if we find that in a customer satisfaction survey, 56 per cent of customers expressed themselves as ‘broadly satisfied’ with the service they were receiving, what are we to make of this figure? It would be helpful to know before we start the survey, the benchmark criteria for ‘good’, ‘bad’ and ‘indifferent’ performance. One way of achieving this is by benchmarking against other companies in the field. If we found, for example, that no industry competitor had achieved a satisfaction rate above 40 per cent, then any figure above 50 per cent would look relatively good.

Collecting benchmark data, of course, is not always a simple exercise. If we need data on competitors they are unlikely to give it to someone working in a rival organization. There are a number of possible solutions, including the use of:

• Overseas organizations. Concentrate on overseas organizations who are in the same business or service but not in direct competition (due to geographical distance). Sometimes organizations might have websites that offer data on their mission, structure, products and services, etc. There may be articles about the organization in trade or professional magazines or journals.

• Organizations in different industries that share similar problems or have business activities in common. A researcher, for example, working for an airport might research customer satisfaction data for bus or train companies. The challenge here is to show how the lessons from a related but different industry can be transferred to the target area for the research.

Whatever the focus of the study, one of the key issues is the selection of the sample. For example, in surveying attitudes of residents towards a city transport system, do we contact those who live in the city centre, in the suburbs, or also include people who commute into the city from outlying towns? What age groups do we use? Do we only count people who are 18 years old and above? What about young adolescents, say, above the age of 14 who also use the transport system? There needs to be an age cut-off point somewhere, so it is sensible to limit the sample to those people who are capable of providing accurate information.

Another important issue is the selection of the sampling frame, that is, the source or sources that include the population members from which the sample is to be selected. For general population surveys, the most common source for
the sampling frame is telephone directories. If we were to conduct a survey of teaching staff in a university, the sampling frame would be the names held on personnel records. As we saw in Chapter 6, of central importance is the question of how much the sampling frame is representative of the eligible population. If we take the example of telephone directories, obviously not everyone has a telephone. Telephone ownership tends to be lower for poorer social groups and in certain localities, and these people may hold different views from those of telephone-owning households. How much bias does this generate in a survey? Czaia and Blair (2005) suggest that most researchers are not too concerned by this threat because non-telephone households are proportionately so small (at least in most industrialized countries).

At this preliminary design stage other factors that need to be considered are the budget for the study and the time available. In general, the cheapest form of survey is through using mail, then telephone surveys. Face-to-face surveys are the most expensive, particularly for large-scale studies, when interviewers will have to be recruited and trained. This is also the stage at which careful thought needs to be given to how the data are to be collected, captured and analysed.

**STAGE 2: PRE-TESTING**

This stage involves the testing or piloting of elements such as the sampling frame (is it representative of the target population?), survey questions and data collection tools. It is likely that several drafts of the research tool will have to be tested before a satisfactory version is reached. If resources permit, focus groups can be used to discuss the validity of individual questions, or to evaluate the overall design of the survey. If interviewers are going to be used, they will require training and debriefing to ascertain whether the training has been successful.

**TOP TIP 9.2**

In running a pilot survey, respondents will be helped if you provide them with written instructions on what you want them to do. You could indicate, for example, that you want them to comment on:

- The instructions for completing the questionnaire.
- The validity of each question, asking respondents whether they want an individual question deleted or modified – and if the latter, how.

**STAGE 3: FINAL SURVEY DESIGN AND PLANNING**

The pre-testing will inform planners as to what changes need to be made to the various elements, such as the choice and size of sampling frame, the questionnaire
itself, interviewer training, data coding and plans for data analysis. A common occurrence at this stage is to find problems with the representativeness of the sampling frame. For example, it might be found that the responses of a particular sub-group (say, male nurses) were quite different to the main group (female nurses). A decision would have to be made (within the constraint of time and budgets) on whether to increase the size of this sub-group sample. Of course, if the budget is fixed, this implies that the size of the other sub-group (female nurses) will have to be reduced. Researchers, then, need to consider what impact this may have on the reliability of the results.

**STAGE 4: DATA COLLECTION**

Apart from the data collection and coding process itself, at this stage one of the most important activities is to monitor the rate of completed interviews and the rate of non-response. The latter should be measured by specific category, each of which has different implications for the research, namely:

- Non-contacts (try to re-contact).
- Refusals (try to ascertain reasons for refusal).
- Ineligibles (replace by eligible respondents).

If interviews are being conducted, the performance of individual interviewers needs to be checked for their success rate at achieving interviewee cooperation and the quality of the interview data. For example, are there some interviewers who consistently fail to get all questions in the questionnaire completed? Is this accidental or does it point to a problem? The importance of reducing sources of error will be explored in more depth later in the chapter.

**STAGE 5: DATA CODING, ANALYSIS AND REPORTING**

At the coding stage, a number is assigned to the responses to each survey question, and these are then entered into a data record that includes all the responses from one respondent. Each respondent is then given a unique identity number. Before data analysis can begin the data have to be ‘cleaned’, that is, checked for obvious errors. If, for example, a question has only two possible responses, ‘Yes’ (= 1), or ‘No’ (= 2), but the data file contains the number 3, then clearly an error has been made and must be corrected.

**Activity 9.1**

Take a survey that you have conducted or intend to carry out. Are there any steps in Figure 9.1 that you would omit? If so, justify your decision.
SELECTING A SURVEY METHOD

Saunders et al. (2007) comment that the design of a survey questionnaire will depend on how it is to be administered, that is, whether it is to be self-administered, or interviewer-administered. Within these categories, they distinguish between six different types of questionnaire (see Figure 9.2). Of these, the most commonly used are postal questionnaires, structured (face-to-face) interviews and telephone questionnaires, although the use of the online questionnaire is becoming increasingly popular. The starting point for selecting between them is the purpose of the survey and the kinds of questions that the research intends to ask. Resources such as time and budgets are also part of the decision-making equation.

SELF-ADMINISTERED QUESTIONNAIRES

Postal questionnaires

Mangione (1995) suggests that postal surveys are best considered when:

- The research sample is widely distributed geographically.
- Research subjects need to be given time to reflect on their answers.
- The research subjects have a moderate to high interest in the subject.
- The questions are mostly written in a close-ended style.

Certainly, postal questionnaires are most suited to situations where the questions are not over-elaborate and require relatively straightforward answers. They also
allow respondents time to consult documents and to complete the questionnaire in their own time. Respondents may also be more amenable to answering personal and delicate questions through this more anonymous medium. It is possible that answers may be more honest than when faced by an interviewer, when they may be tempted to impress by exaggerated responses or a socially desirable response (SDR). Postal questionnaires are normally one of the cheapest methods to use and can achieve relatively high response rates when the topic is relevant to the audience.

Kerlinger and Lee (2000), however, warn that the postal questionnaire has serious drawbacks unless it is used with other techniques. Problems include a low return rate and an inability to check the responses that have been given. They caution that response rates as low as 40 or 50 per cent are common, which means that the researcher has to be careful about making strong generalizations on the basis of the data. Czaja and Blair (2005) also caution that postal surveys are prone to response bias because of lower returns from people with low levels of literacy and education. This group are more compliant with, say, interviews, because no demands are made on their reading abilities. If response rates are low, those responding may be doing so on the basis of some interest or commitment to the subject, making them a volunteer rather than a genuinely random sample. Kerlinger and Lee (2000) argue that with postal questionnaires only a response rate of 80 or 90 per cent is acceptable, and every effort should be made to achieve this. Ways of improving response rates are explored later.

**Delivery and collection questionnaires**

Delivery and collection questionnaires are simply delivered by hand to each respondent and collected later. This has the advantage over postal questionnaires in that there is some direct contact with potential respondents, that might in turn induce a greater proportion of people to complete the questionnaire. But like all questionnaires, this will largely be determined by how interesting the audience finds the survey. One of the considerable disadvantages of this approach, obviously, is the time and effort involved in delivering and collecting the questionnaires.

**Online questionnaires**

Online questionnaires are a relatively new, but an increasingly popular way of conducting surveys. Essentially, there are two ways in which an online questionnaire can be delivered – as a word processed document attached to an e-mail, or via a website. With emails, the researcher will have to know the email addresses of respondents so that the sample can be targeted. With Web-based surveys, if
the site is not password-protected, there is no control over who completes the survey form. This means that respondents will comprise a volunteer rather than a random sample, with corresponding threats to the validity of the data. Conversely, if the site is password-protected, this presents a further barrier to respondents and could tend to push the response rate down. The problem of security is partially solved if the research is focused on just one organization that possesses an intranet, with firewalls to block access from external visitors. But again, the researcher may find it difficult to control who responds. There is conflicting evidence as to whether making use of Web-based surveys increases response rates, leads to lower response rates or makes no difference. Certainly, response rates are likely to be higher for groups who have Internet access, are experienced in using computers and have some motivation to complete the survey.

Sampling error is by far the greatest threat to the validity of online questionnaires (Ray and Tabor, 2003), mainly because certain demographic segments of the population may be under-represented or simply not represented at all. Those households who do not have access to the Internet probably differ to those who do in terms of socio-economic status and education, for example. It becomes necessary, therefore, to provide evidence or arguments that the non-online population does not differ significantly in terms of its choices or decision-making compared to online respondents.

Being more impersonal, it might be assumed that online surveys are less prone to elicit socially desirable responses (SDRs) that might bias the results. Hancock and Flowers (2001), however, report that while some studies have suggested that computer responses are more candid and less influenced by social desirability than responses provided on paper (such as postal questionnaires and structured interviews), their own research did not support these findings. At best, online responses were no worse. Online surveys, then, should probably be chosen more on the basis of lower costs, than for the reduction in response bias.

ON THE WEB 9.3

For an example of software tools that you can use to build an online survey, see each of the following:

http://www.surveymonkey.com/
http://www.surveymonwriter.com/

Use the Tutorial or Demo for each site to get the ‘feel’ of each tool.

In addition to constructing online questionnaires, Web-based surveys can also be carried out via a Web discussion group. Here a question, or set of questions,
can be posted to the group in the form of a simple email. Since discussion groups (such as listservs) are set up around specific discussions, you need to be sure that the research subject is of relevance and interest to the group. The next Case Study provides an example of how a discussion group was used to conduct a research study.

CASE STUDY 9.2 CONDUCTING A SURVEY THROUGH AN EMAIL DISCUSSION GROUP

Two researchers were interested in the views of fellow researchers on the safety procedures necessary in being a lone researcher. To gather data, they chose six email discussion groups. Initially they sent an email requesting only basic information, but after an encouraging response, they sent a more structured set of questions in a second email. This requested details on respondents’ gender; age; occupation; area of work; country of fieldwork; whether they had been given safety guidelines; whether they had experienced incidents while conducting research; and recommendations for ‘best practice’ when researching alone.

A total of 46 responses were received, of which 13 were from males and 33 from females, with ages ranging from the late 20s to the early 60s. Thirty-one were from the UK (possibly resulting from the UK bias of four of the discussion lists). Four were from Australia, six from the USA, and one from each of Finland, Norway, Sweden, Italy and Canada. Some of the replies were quite detailed.

While the sample could not be regarded as representative, this survey method proved to be cheap, speedy at gathering data, and illuminative in terms of the quality of data it elicited. Also note its international character.

Source: Adapted from Kenyon and Hawker, 1999

ON THE WEB 9.4

Take a look at some of the email discussion groups available at:

http://www.jiscmail.ac.uk/

In the Find List,, type in one of your research topics to see if a discussion list already exists. Alternatively, click on alphabetical indexes to browse the lists.
INTERVIEWER-ADMINISTERED QUESTIONNAIRES

Structured interviews

Structured, face-to-face interviews are probably the most expensive survey method because they require large amounts of interviewer time, a significant proportion of which is often spent travelling to and from interviews. The questionnaires on which the interviews are based can be difficult, time-consuming and costly to produce. However, response rates are usually slightly higher than for methods such as telephone interviews, particularly if a letter can be sent in advance, explaining the purposes of the structured interview. Response bias is also fairly low because refusals are usually equally spread across all types of respondent. Structured interviews are the most effective method for asking open questions and for eliciting more detailed responses. Like telephone interviews but unlike postal questionnaires, structured interviews allow for the use of probing questions in response to unclear or incomplete answers.

Interview schedules may begin with factual information: the respondent’s sex, marital status, education, income, etc. This is often referred to as the ‘face sheet’ and is vital for two reasons; first, it allows for the later studying of relationships between variables – for example, an attitude towards an organization’s product or service and respondents’ educational background, or income level. Secondly, it allows for some rapport to be built with the interviewee at the start of the interview. The personal interview helps in ascertaining a respondent’s reasons for doing something or holding a personal belief. Of course, there may be differences between what people believe and what they do, and between what they think they do and their real actions in practice. There is also the problem that respondents are more likely to over-report socially desirable behaviour than when answering through postal interviews.

Focus group interviews

The use of focus groups allows for a sample of respondents to be interviewed and then re-interviewed so that attitudes and behaviours can be studied over a period of time (a longitudinal survey). An advantage of focus groups is that they allow for a variety of views to emerge, while group dynamics can often allow for the stimulation of new perspectives. Indeed, sometimes these new perspectives may provide the basis for a survey.

Focus groups are increasingly used in the political arena and are also a common tool in market research. Within a business or organization, they can be useful in engaging the commitment of people, especially in circumstances where there is cynicism or hostility towards the research theme.
Telephone surveys

The telephone survey is the most widely used of all the survey methods. One factor in its favour is the growth of household telephone ownership, reaching over 90 per cent in some countries. Indeed, with the spread of cellphones, many households are now multiple telephone owners. Most surveys are currently conducted through home telephones, but it is likely that cellphone surveys will spread, especially when they want access to younger age groups, for whom the cellphone is now a social accessory.

Response rates for telephone surveys are relatively high (60–90 per cent when repeated callbacks are made) because most people are willing to be interviewed by telephone (although recall the resistance to junk calls noted in Case Study 9.1). In contrast to postal surveys, it becomes possible for interviewers to convince people of the significance of the research or to reschedule the interview for a more convenient time. If people prove difficult to contact, Czaja and Blair (2003) recommend five to nine callbacks on different days of the week and at different times of day. With some groups, for example, older adults, making contact through either an interview or postal questionnaire prior to a telephone follow-up can boost the response rate (Wilson and Roe, 1998).

One of the limitations of telephone interviews is the type of questions that can be asked. Questions need to be short and fairly simple, and the kinds of response choices few and short. Sentences should be limited to 20 words or less and language kept as simple as possible. If calling groups who are not conversant with a country’s first language, then it is prudent to use interviewers who can speak the respondent’s language.

Activity 9.2

In deciding between the various survey methods, make a list of the advantages and disadvantages of each. Which, on balance, is the best for your own survey? Justify your choice.

CONDUCTING A STAFF OPINION SURVEY

Perhaps the most common survey in business is the staff opinion survey, which can provide valuable insights into many elements of an organization’s operations, including working practices, communications, management structures, leadership, general organization, and customer relations. For example, a staff survey might be invoked to assess attitudes towards proposed changes, or to predict problems before they occur, or to ascertain what actions need to be taken to improve staff morale, confidence and loyalty. Their value can be greater if a
survey methods. One factor is ownership, reaching over a wide range of cellphones, many surveys are currently conducted, and cellular surveys will target age groups, for whom the frequency high (60-90 per cent) are willing to be contacted. Calls noted in Case studies are possible for interviewers or to reschedule the interview contact. Caia and Sandilands (1998) identified that in a survey, older adults, with questionnaire prior to a questionnaire. The type of question that is simple, and the kinds of questions that internalize to 20 words or less on questions who are not converted to use interviewers who conducted surveys can be compared to a similar one conducted in the past (a longitudinal design), or with surveys conducted in similar organizations, or with other sources of benchmarking data. Whatever the subject of the staff opinion survey, it is essential that the results are fed back to all staff, particularly those who provided the information, otherwise the response rates to future surveys is likely to be low.

As Figure 9.1 showed, all surveys must be conducted according to a carefully devised plan, and staff opinion surveys are no exception. Indeed, because they involve contacting many people within an organization, it is essential that, if ‘political fallout’ is to be avoided, they must be seen to be professionally designed and conducted. This is also essential in assisting a high return rate – vital if the organization’s policy is to be influenced by the results. We will look in turn at the typical stages involved in a staff opinion survey, many of which should, by now, be familiar.

IDENTIFYING AIMS AND OBJECTIVES

An organization must have a sound reason for wanting to conduct the survey in the first place, since money and resources are going to be used in its planning and implementation. The anticipated results need to outweigh the costs of the survey. Once the organization is satisfied that this is the case, a concise set of aims and objectives should be drawn up. If, for example, a company has just taken over a rival firm, it might want to conduct a survey among the new set of employees on how they have reacted to the take-over and their perceptions of their new employers (including their fears and anxieties). A well-defined set of aims and objectives provide a basis for also determining the scope and structure of the survey and for evaluating its effectiveness.

PLANNING THE SURVEY

Establishing the scope

Assessing the scope of the survey is important. It is relatively easy to construct long surveys that attack a range of themes, none of which fits comfortably together. The reports that result from surveys of this kind will have difficulty in providing coherent, focused recommendations for implementation. One approach is to start with a broad but shallow survey that addresses a range of topics, but not in significant depth, to highlight key themes. This could be followed with a detailed survey on prime concerns. If one of these problems was, for example, a staff turnover change, or to its extent need to be taken into the blue can be greater if a
Considering the audience

We saw in Chapter 6 that, often for practical reasons, representative samples must be chosen from the population. With staff surveys, however, it is often possible (and desirable) to contact the entire population. In designing a survey for a specific audience, it is necessary to consider their traits and attributes. For example, their educational and literacy levels (including first language), qualifications, experience in the sector or business, technical knowledge and national culture. A survey, say, that asked respondents to provide information on their 'Christian' name, would be offensive to people of non-Christian religions, or of no religious persuasion. No matter what the social or ethnic composition of an organization, survey designers need to be aware of multicultural sensitivities.

Getting the timing right

Even short-term changes in an organization can have an effect on staff morale and hence the chances of people being willing to complete a survey. This can also include rumours, whether substantiated or not, of changes about to occur. It is important to conduct staff opinion surveys during periods when the organization is not affected by these one-off developments. This is particularly important when the results are going to be compared with those from a previous survey. It will almost certainly help to pilot the survey first to make sure that there are no embarrassing misunderstandings. Staff opinion surveys are high profile!

Creating publicity

Taking Dillman's (2007) advice, advance notice of the survey is important for assisting the return rate. Employees need to know why the survey is being carried out and what will be done with the results. A guarantee of confidentiality is, of course, essential. Publicity for the survey and its credibility will be most effective if this comes from the highest level of the organization, particularly if this is the organization's chief executive or managing director. For many organizations, this publicity will be delivered via its intranet, or staff newsletter.

Selecting research tools

As we have seen earlier, there are a number of alternative survey methods, and any staff opinion survey will benefit from the use of a variety of approaches. Hence, a typical survey may use not only paper-based questionnaires, but questionnaires delivered via email and the intranet. Interviewer-administered questionnaires are less likely to be used for staff opinion surveys due to the time and costs involved as well as the lack of confidentiality.
Analysing the results

The impact of a survey is enhanced if comparisons can be drawn between different categories of respondent in the organization. Hence, for the analysis to have much significance, the survey should be aimed at capturing the opinions of staff in different departments or business units, functions, locations, age groups, levels of seniority, length of service, etc.

Care should be taken, however, to ensure that the use of these categories is accurate. In the modern world, organizations change quickly. Departments get renamed, moved or closed down. New departments or sections open up but news of this may not be generally shared throughout the organization, especially large ones. People get promoted or leave the organization. You need to ensure that you are working from the latest records (sampling frame) of organizational information.

USING THE RESULTS

Reporting results to management

Many staff opinion surveys may require two different kinds of report. If the organization is a large company, a Corporate Report might be needed at top management level. The Corporate Report should include:

- An overview of the results for the whole organization.
- A comparison, if possible, between the current survey and previous surveys to illustrate trends over time.
- An Executive Summary that features key points, conclusions and recommendations.

Corporate Reports may also sometimes include the results of similar surveys conducted in other companies to establish benchmarks. An essential feature of a Corporate Report is that it should be easy to read, and so presenting data in tabular and graphical form is very important.

Another kind of document, a Management Report, is needed by the managers of individual business units, divisions, departments or locations. The Management Report might include a comparison between:

- Different business units, departments or locations within the organization.
- The views of people of different grades or levels.
- The views of people of different age ranges or length of service.

For very large surveys in complex organizations there can be quite a significant time gap between the collection of the data and the publication of the
report. In this case the publication of a short one- or two-page Flash Report, summarizing the findings, could be useful, particularly if these could be broken down, by department or section. In some cases this could comprise a smaller set of Web pages that are linked from the ‘What’s New?’ section of an organization’s main Web home page.

**Reporting the results to employees**

Staff opinion surveys create expectations amongst employees, hence, it is essential that results are disseminated as soon as possible. This should include those cases where the results of the survey are not in line with management hopes or expectations. Not to publish a report will only fuel resentment and make any future staff opinion survey difficult to implement. The best approach is for management to show that they are willing to acknowledge the results and to take action. Reporting results to staff could be through staff newsletters, bulletin boards, emails or team meetings – or all of these.

**Implementing the results**

For the results of a staff opinion survey to have any lasting impact it is necessary that a planned and coherent series of actions be conducted. These could include:

- The appointment of a director or senior manager responsible for coordinating follow-up actions across the organization.
- The appointment of a senior manager responsible for coordinating follow-up actions in each division or department.
- Agreement on a timetable and process for implementation.
- Agreement on a system for monitoring the implementation of recommendations stemming from the survey and for communicating the effectiveness of the implementation.

**REDUCING SOURCES OF ERROR**

In an ideal world, the selected sample exactly mirrors all facets of the target population. Each question in the survey is clear and precise and captures the sphere of interest exactly. Every person selected for the sample agrees to cooperate; they understand every question and know all the requested information and answer truthfully and completely. Their responses are accurately recorded and entered without error into a computer file. If only real world surveys were like this! In the real world, gaps and distortions in the data become sources of error.
The two main sources of error are variance and bias. Variance results from different measures occurring in repeated trials of a procedure. One of the most common sources of this is sampling error (see next section). Variance can also refer to the variability of the dependent variables in a study that cannot be associated with changes in the independent variable. McBurney (1998) suggests that changes in the dependent variable associated with changes in independent variables is fine, but variance is an example of 'bad' variability because it distorts the data and should be controlled. Other sources of variance are the percentage of respondents who can be contacted for an interview, or the number of refusals to answer a particular question.

Bias occurs when a measurement tends to be consistently higher or lower than the true population value. If, say, we conducted a survey of income levels in a community, there might be a tendency for those on lower incomes to report that they earn more due to social embarrassment. Conversely there might also be a tendency for wealthier social groups to report lower income levels than they earn, perhaps because they subconsciously fear the listening ear of the tax authorities!

**SAMPLING ERROR**

Sampling error, as we have seen, is one of the sources of variance. If the population for the study is split between males and females, even a random sample can finish up with, say, 52 per cent females and 48 per cent males. A common source of sampling error, however, lies with sampling frames. We would like the frame to list all members of the population that have been identified, and to exclude all others. Unfortunately, this is often not the case. One problem is that of under-coverage, where people are missing from the sampling frame. For example, if telephone directories are used as sources of the sampling frame, some groups of people may have their numbers excluded from the directory. This is not a problem if the under-coverage is random, but poses problems if the exclusion is more prone amongst some groups than others. Furthermore, the sampling frame may not include people who have just moved house. This is not problematic if such people are typical of the population as a whole, but, again, becomes an issue if they are different in terms of key characteristics.

A reverse problem is that of over-coverage where the sampling frame contains people who are not members of the target population. This occurs, for example, when quite generalized sampling frames are available (such as telephone directories, or membership lists of clubs or associations) but specific groups are required for the sample. This difficulty can be overcome in several ways. One is to contact members of the sampling frame and ascertain whether they belong to the required sample. Another is to design the questionnaire or interview schedule in such a way that ineligible respondents are identified early and screened out.
ON THE WEB 9.5

To calculate sampling error for a given size of sample, population and confidence interval, visit the DSS Research site at:

http://www.dssresearch.com/toolkit/default.asp

Click on Sample Error calculator. Note that the site also contains a tool for calculating sample size.

DATA COLLECTION ERROR

One of the simple solutions to reducing error at the data collection stage is maintaining a robust record-keeping system so that the amount of missing data can be minimized. At the unit level (person or household), records will include details of all those who have responded, non-respondents and follow-up mailing or interview details, and the number and timings of re-attempted telephone calls. Apart from well-organized follow-up processes, non-response can also be reduced by making questionnaires easy to answer. In the case of interviews, non-respondents can be re-contacted by more experienced and persuasive interviewers.

In addition to non-response, missing data is also a problem. In postal surveys there are several ways of coping with missing data:

- Ignoring the items and code as 'missing' in the data set.
- Trying to determine what the answer should be.
- Re-contacting the respondent.

The choice of steps taken partly depends on the value of the missing data. If it is of central importance to the study, then rather than ignoring it, or guessing what it might have been, the best step is to try to contact the respondent. Copas and Farewell (1998) discuss some of the statistical methods for dealing with non-response when these gaps in the data cannot be ignored. If the level of data loss is small, however, and of relatively low importance, then it may be safe to ignore the problem.

IMPROVING RESPONSE RATES

To improve low response rates it is often necessary to locate their causes. Dillman (2007) suggests that low response rates may result from:

- Difficulties in defining the organizational entity. Does the survey deal with individual 'units' of the organization or the organization as a whole?
- Problems in getting to the targeted correspondent. In large organizations, for example, senior managers may have their post opened by administrative staff and personal assistants who may make the decision on whether the survey is passed on for completion.
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• Organizations having a policy of not responding to surveys.
• Data sources needing to be consulted, taking up time, even if records are available and not confidential.

In general, response rates will be higher if the respondent has the authority to respond, the capacity to respond (access to the information) and the motivation to respond (it is in his or her interests to do so). Dillman (2007) suggests that a number of factors are critical to achieving a high return rate from organizational surveys.

• Identifying the most appropriate respondents and developing multiple ways of contacting them. This is particularly helped if names and job titles are known in advance. Prior telephone calls can help here, and can also assist in identifying where in the organization the survey should be sent.
• Planning for a mixed-mode design, using not only a questionnaire but other forms of contact such as emails or the telephone. While surveys targeted at individuals may require about five contacts, organizational surveys may require more.
• Developing an easy-to-complete questionnaire with embedded instructions on how to complete the questions (see Chapter 13).
• Conducting on-site interviews to help tailor the questionnaire to the knowledge and cognitive capabilities of the audience. This may also help identify questions that are too sensitive.
• Targeting organizational surveys on gatekeepers if possible.
• Being cautious about the use of financial incentives (unlike individual surveys), as this may not be ethically acceptable in some organizations.

TOP TIP 9.3
It is worth spending additional time getting the 'look and feel' of the questionnaire right. Survey instruments that are professionally presented and easy to complete will generally get higher response rates.

Jobber and O'Reilly (1996), however, do suggest the use of direct incentives for responding. Table 9.1 illustrates data on monetary incentives taken from the authors' analysis of 12 studies. Even though the sums are relatively modest, the act of 'giving' helps to build an obligation to respond on the part of the recipient. Non-monetary incentives include the use of gifts such as pens or pocket-knives, but the data suggest that these are slightly less effective than direct monetary incentives. When using pre-paid envelopes for the return of questionnaires, evidence suggests that stamped rather than business reply.