

APPLICATIONS OF CASE STUDY RESEARCH

Second Edition

Robert K. Yin

Applied Social Research Methods Series
Volume 34

1

The Role of Theory in Doing Case Studies

Reliance on theoretical concepts to guide the design and data collection for case studies remains one of the most important strategies for completing successful case studies. Such theoretical concepts can be useful in conducting exploratory, descriptive, or explanatory (causal) case studies.

The goal is to develop preliminary concepts at the outset of a case study. One purpose served by such concepts, as in any other empirical study, is to place the case study in an appropriate research literature, so that lessons from the case study will more likely advance knowledge and understanding of a given topic. A second purpose, possibly more important for case studies than for other types of research, is to help define the unit of analysis (what is the case?), to identify the criteria for selecting and screening potential candidates for the cases to be studied, and to suggest the relevant variables of interest and therefore data to be collected as part of the case study. Without guidance from the preliminary theoretical concepts, all these choices may be extremely difficult and hamper the development of a rigorous case study.

How theory was used in five different case studies is the subject of the present chapter. The topics of the case studies cover (1) organizing local services and routinizing innovations, (2) forming and maintaining interorganizational partnerships, (3) attracting high-tech firms to locate in research parks, (4) explanations for how and why research findings are eventually put into practice, and (5) initiatives in special education (the education of students with disabilities) undertaken by four states. To demonstrate the usefulness of theoretical concepts in doing case study research, the five different case studies include examples of exploratory, descriptive, and explanatory (causal) case studies.

AUTHOR'S NOTE: This chapter is an expanded and adapted version of a paper that first appeared in Huey-tyh Chen and Peter H. Rossi (Eds.), *Using Theory to Improve Program and Policy Evaluations* (pp. 97-114, 1992), an imprint of Greenwood Publishing Group, Inc., Westport, Connecticut. Used with permission.

WHAT IS THE CASE STUDY METHOD?

The case study is the method of choice when the phenomenon under study is not readily distinguishable from its context. Such a phenomenon may be a *project* or *program* in an evaluation study. Sometimes, the definition of this project or program may be problematic, as in determining when the activity started or ended—an example of a complex interaction between a phenomenon and its (temporal) context. Other examples of such complex interactions abound, including varied situations such as those discussed in subsequent chapters of this book—for example, a community organization and its neighborhood, the implementation of personal computers in schools, and a manufacturing firm and its marketplace (see Chapters 2, 3, and 6). All are situations warranting the use of case studies.

The inclusion of the context as a major part of a study, however, creates distinctive technical challenges. First, the richness of the context means that the ensuing study will likely have more variables than data points. Second, the richness means that the study cannot rely on a single data collection method but will likely need to use multiple sources of evidence. Third, even if all the relevant variables are quantitative, distinctive strategies will be needed for research design and for analysis. The development of rigorous techniques and strategies under these conditions—in comparison to the conditions faced by ethnography, history, quasi-experimentation, and surveys—has been the continuing quest in defining the case study method, as depicted in the companion to this book (Yin, 2003). Furthermore, a continuing priority is to consider case studies as a method not implying any preferred form of data collection.

WHAT IS THE ROLE OF THEORY IN DOING CASE STUDIES?

Revived interest in the role of theory in doing evaluations (Bickman, 1987; Chen, 1990; Chen & Rossi, 1989) has had a continued counterpart in the role of theory in designing and doing case studies. Critical examples include the importance of theory in explanatory (not just exploratory or descriptive) case studies (Yin, 1981a) as well as in multiple-case studies based on replication designs (Yin, 1981b). Overall, theory can be important to case studies in many ways, helping in the following areas:

BOX 1 Six Different Types of Case Studies

Theory and theoretical constructs are useful in all kinds of case studies, when case studies are used for research and not teaching or dissemination purposes.

For research, at least six kinds of case studies can be identified, based on a 2×3 matrix. First, case study research can be based on *single- or multiple-case studies*; second, whether single or multiple, the case study can be *exploratory, descriptive, or explanatory* (causal). The present chapter covers three of these six types.

In a nutshell, the 2×3 dimensions may be characterized as follows. A *single-case study* focuses on a single case only; *multiple-case studies*, however, include two or more cases within the same study. These multiple cases should be selected so that they replicate each other—either predicting similar results (literal replication) or contrasting results for predictable reasons (theoretical replication). An *exploratory* case study (whether based on single or multiple cases) is aimed at defining the questions and hypotheses of a subsequent study (not necessarily a case study) or at determining the feasibility of the desired research procedures. A *descriptive* case study presents a complete description of a phenomenon within its context. An *explanatory* case study presents data bearing on cause-effect relationships—explaining how events happened.

(For more information, see Yin, 2003, Chapter 1, sections on “Comparing Case Studies With Other Research Strategies in the Social Sciences” and “Variations in Case Studies.”)

- Selecting the cases to be studied, whether following a single-case or multiple-case design (see Box 1)
- Specifying what is being explored when you are doing exploratory case studies
- Defining a complete and appropriate description when you are doing descriptive case studies
- Stipulating rival theories when you are doing explanatory case studies (see Box 1)
- Generalizing the results to other cases

From this perspective, the term *theory* covers more than causal theories. Rather, *theory* means the design of research steps according to some relationship to the literature, policy issues, or other substantive source.

(2)

Excluded would be considerations of access, convenience, logistics, or nonsubstantive issues. Good use of theory will help delimit a case study inquiry to its most effective design; theory is also essential for generalizing the subsequent results.

The purpose of this chapter is to provide specific illustrations of theory-based approaches to case study research and evaluations. Many of the classic illustrations have been cited elsewhere (Yin, 2003). The present chapter therefore is based on research done at COSMOS Corporation. Reported below are five important applications of theory to exploratory case studies, case study selection, two types of causal case studies, and descriptive case studies.

Easterby-Smith, M., Thorpe, R. & Lowe, A. (2008) Management Research, London, Sage

Case studies

Although case studies are extensively used for teaching purposes, our interest here is in their application to *research*. Essentially the case study looks in depth at one, or a small number of, organizations, events, or individuals, generally over time. There is a very extensive literature on the design, use and purposes of case studies. In the management field authors tend to coalesce around those who advocate single cases and those who advocate multiple cases. Advocates of single cases generally come from a constructionist epistemology; those who advocate multiple cases usually fit with either a relativist or positivist epistemology.

Robert Yin (2002) is the best known exponent of case method in the social sciences. His concern is that case studies are vulnerable to a number of criticisms from more *positivist* researchers. In particular, it is suggested that they do not have the rigour of natural scientific designs. They rarely allow generalizations to be made from specific cases to the general population; and they produce huge piles of data, which allow researchers to make any interpretations they want. In response to these criticisms, he suggests that all case studies should have clear designs produced before any data is collected, and these designs should cover: the main questions or propositions, the **unit of analysis**, links between data and propositions, and procedures for interpretation of data. His main concern is to demonstrate that case studies may contain the same degree of validity as more positivist studies and therefore his exposition of the method contains both rigour and the application of careful logic about comparisons.

The contrasting position, which is informed by a *constructionist* epistemology, is much less concerned with issues of validity, and more concerned with providing a rich picture of life and behaviour in organizations or groups. Robert Stake (2006) writes about qualitative case studies, and distinguishes between instrumental and expressive studies. The former involves looking at specific cases in order to develop

general principles; the latter involves investigating cases because of their unique features which may, or may not, be generalizable to other contexts. An example would be Andrew Pettigrew's (1985a) research into Organization Development within ICI during the 1970s and early 1980s. In those days ICI was the most powerful manufacturing company in Britain, so there was naturally a lot of interest in understanding how they were managing and developing themselves. In that respect, the study was expressive, but there was also an instrumental element since Pettigrew was interested in understanding the phenomenon of organization development, and ICI was regarded as one of its leading proponents. His research involved numerous interviews with key actors in the company over several years, and this provided a longitudinal element to his research which enabled him better to understand both the contextual and historical settings of the company.

From a similar perspective, Nikkolaj Siggelkow (2007) provides a spirited defence of cases arguing that they are particularly valuable for demonstrating the importance of particular research questions, for inspiring new ideas and for illustrating abstract concepts. He also points out that even single cases can provide very convincing tests of theory by quoting the famous 'talking pig' example. Thus we only need to produce one example of a talking pig to demonstrate the error of the popular idea that pigs are incapable of intelligent speech. The logic being that we only need a single example of an anomaly to destroy a dominant theory – as in the case of Einstein's refutation of Newton's theory. And although we are unlikely to identify a 'talking pig' organization, there are many examples where single cases can be uniquely interesting – for example, the company that does significantly better (or worse) than all others in the same industry, or the entrepreneur who builds a fortune from small beginnings.

EXERCISE

5.3

A longitudinal case study

A recent study conducted by Prieto and Easterby-Smith (2006) explored the links between dynamic capabilities and knowledge management through a case study of the evolution of a single company over several years. Because the researchers were interested in dynamic capabilities – which are by definition about continuous change – it made sense to observe processes over time so they could examine how, for example, the introduction of knowledge sharing routines led to greater strategic flexibility. Accordingly, the researchers spent time observing management meetings, talking with participants at meetings and interviewing other managers. They also followed information exchanges with partner organizations by conducting visits to their sites; repeating interviews with key informants; and feeding back emerging insights to senior managers to 'validate' their interpretations and to stimulate further insights.

Questions

- A** How would you justify that this research was 'valid'?
- B** What possibilities are there for generalizing the findings from this research?
- C** Do questions about validity and generalisability make any sense in this instance?

3

TABLE 5.2 Key features of case method informed by different ontologies

	Realist (Yin)	Relativist (Eisenhardt)	Constructionist (Stake)
Design	Prior	Flexible	Emergent
Sample	Up to 30	4–10	1 or more
Analysis	Across	Both	Within case
Theory	Testing	Generation	Action

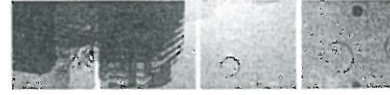
A few points are important about constructionist studies. First, they are based on direct observation and personal contacts, generally through interviews. Second, they take place within single organizations, but then involve sampling from numbers of individuals. Third, the collection of data takes place over a period of time and may include both live observations and retrospective accounts of what has happened. Thus the unit of analysis is either the individual, or specific events such as the exchange of a piece of knowledge, or strategies employed to transfer or retain control of knowledge.

There is a third, *relativist*, position which has been developed particularly through the work of Kathy Eisenhardt (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). This view, which draws inspiration from both the positivist and constructionist positions, has been adopted widely by researchers using case method, particularly in North America. She is eclectic in her advice about methodology: using designs that are established at the outset, but then being flexible about their adaptation; recommending data collection through using multiple methods; and conducting both within case and across case analysis.

Above all, Eisenhardt is concerned about building theory from case based research, and this takes the form of developing hypotheses. She recommends that hypotheses can be formed, or 'shaped' through three main stages. The first stage involves sharpening up the basic constructs, and this is essentially an iterative process of moving back and forth between the constructs and the data. The second stage involves verifying that emergent relationships between constructs fit with the evidence from each case. In this respect she comments that: 'Each case is analogous to an experiment, and multiple cases are analogous to multiple experiments' (1989: 542). The third stage involves comparing the emergent theory/concepts/hypotheses with the existing literature. In particular, she suggests paying attention to literature that is contradicted by the evidence, both because any evidence of having ignored contradictory findings is likely to reduce confidence in the final conclusions, and because the highlighting of contradictory conclusions is likely to make the original contribution from the research most explicit.

Although the variations in case study design and application are complex and sometimes blend into each other, we summarize in Table 5.2 some of the main distinctions in the use and application of case method according to each of the three basic ontologies.

In a comparative study of investment decisions in Chinese and UK companies (Lu and Heard, 1995) case studies of 16 decisions in eight companies were compared and contrasted in order to establish the cultural and institutional variations in business decision-making between China and the UK. The study involved collecting both qualitative and quantitative data, including extensive site visits to companies in both China and the UK. Each UK company was matched, in terms of size and industry, with the equivalent Chinese company. This allowed for a number of comparisons, between different industries, and between China and the UK which led to a number of emergent insights. For example, in the latter case the researchers noticed that the mean time between the inception and implementation of a major investment decision (approximately £100 million) was virtually identical in both China and the UK (approximately 3.4 years). This significantly contradicted theory of that time which suggested that decision-making in China was far slower than in the UK. Of course, with the benefit of hindsight it is possible to now see how fast Chinese companies have been developing over the last two decades; but this study was one of the first to demonstrate the speed of economic development in China.



Comparative case study design

EXAMPLE 5.5

Case study

Unlike the research designs discussed above, a case study includes either a single case or a small number of cases but each case is explored in detail and great depth. A variety of different types of data about the case may be gathered, and both cross-sectional and longitudinal data may be included.

The subject of the case may be a person, an organisation, a situation or a country, but the study must relate to a particular aspect of the case as demonstrated in your research question. There are usually boundaries to the case, making it clear what is within the case to be studied and what is not. In this sense, it takes a holistic approach to the study, as the relationship between the component parts of the case and the case as a whole – the social context – are all of interest to the researcher. However, a case study is not simply an in-depth study of a community, organisation or group. The case itself must be pertinent to the research topic. The selection of the case is therefore significant, in terms of its potential to produce data that will enable you to address your research question. The focus of research interest must be included in the case itself, not simply in the range of data that has been collected about it. Yin (2003) sets out a number of criteria for the selection of case studies which may help you to understand the nature of a case study better.

1. *Critical case.* Here the case is chosen as one that will enable the researcher to test a theory or hypothesis. The case includes the potential to show whether the theory holds up or not. This could be a case where an event or change has occurred which provides the researcher with the opportunity to study what happens as a result.
2. *Extreme or unique case.* Here the focus is on a situation or group that is perceived to be different to any other and the focus is on its uniqueness. It may be the only case where a particular combination of people and events are found.
3. *Representative or typical case.* This is effectively the opposite of the unique case. It is a case that is chosen because it is seen to represent many other similar cases – in a sense it is the everyday, ordinary case, which has similarities to others and is chosen on these grounds.
4. *Revelatory case.* This is a case that has the potential to shed light on the research topic. It may be that the researcher has access to a situation that has been hidden.
5. *Longitudinal case.* Many case studies offer the opportunity for research at different time points and case studies may be chosen on the basis of being able to carry out successive studies over a period of time (as discussed above).

Real research

Case study research

C. Chapain and A. Murie (2008) The impact of factory closure on local communities and economies: the case of the MG Rover Longbridge closure in Birmingham, *Policy Studies*, 29(3): 305–17

There have been a number of studies over the last 50 years of the impact of the closure of factories or mines on the local area. However, most are focused on

industries where people live and work in the same area. The researchers sought to examine the impact of a different type of closure, where workers were more geographically spread, and the reduction in workforce took place over a period of at least eight years. The eventual collapse of the car manufacturing company MG Rover, and the closure of its main plant at Longbridge in Birmingham, UK, in 2005, with the loss of 5,900 jobs, provided a case example.

What the researchers did

The researchers gathered secondary data from different sources, including payroll data from 1998 and 2005 (this included information about where workers lived), monthly data about claimants of unemployment benefits, census data and data relating to business activities within the wards.

Findings

The researchers found that the impact of the closure had been felt across a wide geographical area as workers commuted from other parts of Birmingham and towns to the south of Birmingham, although there was a significant local impact.

The research design

The focus of this research was on the wider spatial impact of the closure of a large industrial plant and the case of the Longbridge factory provided a critical case study opportunity.

Example B3.8

Students and alcohol

Case study design

The focus of the case study may be on the way alcohol is consumed within a social group and the way alcohol consumption is perceived to be part of the societal group activity. A university society could be chosen as a typical social group. An alternative may be to choose two-contrasting examples of university societies based on whether the predominant membership is male or female.

Clearly, the selection of a case study can include elements of more than one of these criteria, and the case study can include within it elements of other research designs. This means that, for instance, a cross-sectional study of people living within the case study area may form part of the overall design, or that there may be an opportunity for a quasi-experimental study within the case study.

A case study design may include just one case, or multiple cases may be selected. This may then form the basis for a comparative study (see below).

Your research

Research quality check: case study designs

- Are you able to identify a case that will enable you to address your research question or test your hypothesis?
 - What claims are you able to make about your case study – is it a critical case, a typical case, etc.?
-
- Are you able to identify clear boundaries to your case study?
 - What will you be able to claim for your findings in terms of how they might be generalised or their theoretical value, and their explanatory value?
 - Does the research design enable you to collect data that 'stands in' for social reality – data that reflects the social reality of natural social settings?
 - Does the research design enable you to collect data in a consistent and reliable way?
 - What are the ethical implications of your research design for your research participants?

The four research designs – experimental, cross-sectional, longitudinal and case study – provide the data collection and analysis frameworks with which we can begin to put together our own research plans. We now need to revisit our research questions and, bearing in mind these four designs, look at the overall research strategy needed to address these.

Collis, J. & Hussey, R. (2009) Business Research, A Practical Guide for undergraduate and post graduate students, London, Palgrave

5.4.5 CASE STUDIES

KEY DEFINITIONS

A *case study* is methodology that is used to explore a single phenomenon (the case) in a natural setting using a variety of methods to obtain in-depth knowledge.

A *case study* is a methodology that is used to explore a single phenomenon (the case) in a natural setting using a variety of methods to obtain in-depth knowledge. The importance of the context is essential. Eisenhardt (1989, p. 534) refers to the focus on 'understanding the dynamics present within single setting', while Bonoma (1985, p. 204) notes that it must be 'constructed to be sensitive to the context in which management behaviour takes place'. The case may be a particular business, group of workers, event, process, person, or other phenomenon. Detailed information is collected about the chosen case, often over a very long period of time. One or more cases can be selected.

Yin (2003) identifies the characteristics of case studies as follows:

- The research aims not only to explore certain phenomena, but also to understand them within a particular context.
- The research does not commence with a set of questions and notions about the limits within which the study will take place.
- The research uses multiple methods for collecting data, which may be both qualitative and quantitative.

These characteristics are set in an interpretivist paradigm and if you were taking a more positivist approach, you might develop a theoretical framework and specific research questions.

The different types of case study are not well delineated and one type may be combined with another. *Exploratory case studies* are used where there are few theories or a deficient body of knowledge. Scapens (1990) adds four other types:

- *descriptive case studies*, where the objective is restricted to describing current practice
- *illustrative case studies*, where the research attempts to illustrate new and possibly innovative practices adopted by particular companies
- *experimental case studies*, where the research examines the difficulties in implementing new procedures and techniques in an organization and evaluating the benefits
- *explanatory case studies*, where existing theory is used to understand and explain what is happening.

Opportunist case studies are where the opportunity to examine a phenomenon arises because the researcher has access to a particular business, person or other case (Otley and Berry, 1994). Although such a study may be limited to just a few aspects of organizational life, the results can be extremely stimulating and original.

The main stages in a case study are as follows:

1. Selecting the case – It is not usually necessary to find a representative case or set of cases because you will not be attempting statistical generalizations to show that you can generalize from your sample to a larger population. However, you may be attempting theoretical generalizations where you propose that the theory applied in one set of circumstances can be generalized to another. You may wish to select a critical case that encompasses the issues in which you are most interested. You may also decide that you require more than one case. Similar cases will help to show whether your theory can be generalized and dissimilar cases will help to extend or modify any theory.
2. Preliminary investigations – Bonoma (1985) refers to this as drift and it is the process of becoming familiar with the context in which you are going to conduct your research. Some researchers believe that it is best to keep your mind free of any prior beliefs and to learn from the naturalistic evidence at this stage. Others disagree with this approach and consider that the researcher approaches the project with either explicit or implicit theories. To determine your approach, it may be helpful to reflect on your paradigm and also to consider the purpose you attribute to your research.
3. Data collection – You will need to determine how, where and when to collect data. The methods used to collect data in a case study include documentary analysis, interviews and observation. Eisenhardt (1989, p. 534) advises that it is usually best to 'combine data collection methods such as archive searching, interviews, questionnaires and observations. The evidence may be qualitative (e.g. words), quantitative (e.g. numbers) or both'.
4. Data analysis – You have a choice of within-case analysis or cross-case analysis. If you use the former, it is essential that you become totally familiar with the material. This should enable you to build up separate descriptions of events, opinions and phenomena, which can be used to identify patterns. If you use cross-case analysis, you may choose to draw out any similarities and differences to help you identify common patterns.
5. Writing the report – Writing up case study material can be challenging in terms of determining an appropriate structure and demonstrating that your analysis and conclusions can be linked to the masses of data you will have collected. Students often find a chronological structure is the easiest to adopt, as this means they can relate the unfolding of events as they occur. In an interpretivist study, it is essential that you quote extensively from the data you have collected. Diagrams are often helpful for explaining the patterns you see emerging.

Although a case study methodology has many advantages, access to a suitable case can be difficult to negotiate and the research is very time-consuming. It is also difficult to decide on the scope of your study. Although you may be focusing on a particular organization or group of individuals, they do not exist in a vacuum, but interact with the rest of society. Moreover, your case will have a history and a future, and you will find it difficult to understand the events in a particular period of time without knowledge of what went before and what may follow.

Saunders, M. & Lewis, P. (2012) Doing Research in Business & Management, London, FT/Prentice Hall

Case study

We noted above that the survey method is suitable for asking questions such as 'who?' 'what?' 'where?' 'how much?' and 'how many?' In contrast, the **case study** strategy is more appropriate for asking the question 'why?' (although the questions

Definition

case study: a research strategy which involves the investigation of a particular contemporary topic within its real-life context, using multiple sources of evidence.

'what?' and 'how?' are also relevant). Consequently the case study strategy is most often used in exploratory and explanatory research.

Case studies are particularly good at enabling the researcher to get a detailed understanding of the context of the research and the activity taking place within that context. So, if you are concerned with understanding why managers make decisions in certain ways rather than an analysis of the decisions that are made, who makes them, the frequency of decisions and their perceived importance, the case study may be for you. The key word, of course, is 'context'. Often the key to explaining social phenomena is context. For example, managerial decisions taken in an environment where senior managers are highly supportive of their managers and reasonably tolerant of their failure are likely to be much more adventurous than in an unsupportive climate.

Data collection techniques used in a case study may be varied and include a combination of interviews, observation and documentary analysis as well as questionnaires. Case studies often use a variety of methods, so you are likely to need to triangulate multiple sources of data, a principle which we explain in the last section of this chapter.

The question arises as to whether a single case or a number of cases is most suitable for your research. As with many other decisions related to strategy, this is likely to be governed by what is ideal as a strategy for answering your research questions and what is possible in terms of practical considerations such as access and resources. Like many students, you may choose the organisation in which you work. This is often going to be a practical option. Yet there are likely to be limitations on the extent to which you can call your organisation typical of all similar organisations. For this reason, a case study strategy can also incorporate more than one case. You may choose to use more than one case if you need to generalise from your findings.

Some criticise the case study strategy because they feel that one case, or even a small number of cases, is no basis for placing faith in the findings. They also argue that close exposure to the study of the case biases the findings. For this reason they dismiss case study research as useful only as an exploratory tool. But a well-designed and skilfully executed study of real-life issues will yield insights not possible in more descriptive strategies.

Case Studies and Typologies

In Chapter 5, case studies were discussed as one of the basic designs in non-standardized research. The methods of data interpretation discussed so far work with case studies in various phases of treating the material. Hermeneutic methods mostly produce a case study in the first stage, consisting of a single interaction, document or interview. Comparing the cases is a later step.

In the approach of Glaser and Strauss, however, the single case (the interview, a document or an interaction) is given less attention. When they talk of 'case', they mean instead the field or issue of the study as a whole. This approach starts immediately by comparing interviewees or specific situations.

Producing and Reading Case Studies

Sometimes, for example in the evaluation of an institution, a case study may be the *result* of the research. In other approaches, case studies form the beginning, before comparison becomes more central. A third possibility is to use case studies for illustrating a basically comparative study, in order to highlight links between the different issues studied in the research. In this sense, we included a number of case studies in addition to a thematically structured comparative presentation in our study on health and illness concepts of homeless adolescents (see Flick and Röhnisch 2008).

An essential point in the production and assessment of case studies is the localization of the case and its analysis. What does the case represent and what do you intend to show by analyzing it? Is the presentation about the single person (or institution etc.) *per se*? Does it represent the person as typical for a specific subgroup in the study, or does it represent a specific professional perspective (e.g. the physicians in this field)? What were the criteria for selecting this specific case – for the data collection, for the analysis and for the presentation?

Constructing Typologies

Typologies are constructed in quantitative research, too. However, this step of condensing and presenting results is more often part of qualitative research. Kelle and Kluge (2010) have made some suggestions for how to apply this, which can be used for developing the following procedure.

The first step is either to construct case studies for the cases that are included in the research or, alternatively, to begin with analyses referring to certain issues. This is followed by systematic comparisons (of cases or referring to issues).

The next step is to define relevant dimensions of comparison. Consider what is the focus of the intended comparison – for example, the contents of the concepts of health that had been mentioned on the one hand and age and gender on the other. This may reveal here which substantial dimension characterized the ranges of health concepts that were mentioned and how the various dimensions can be allocated in the differentiation of the age of the cases or what can be found more for male or more for female interviewees.

The next step is to group the cases (according to the substantial dimension and/or age) and to analyze empirical regularities (e.g. certain concepts can mainly be found for younger girls, other concepts more for older boys).

As far as possible, the range of statements should be documented and delimited in order to develop a contrastive framework for single statements. This can be the result of compiling all relevant statements and ordering them along a dimension. In the example of Gerhardt (1988) on family rehabilitation after the husband has fallen chronically ill, this feature space consists of the range of activities found for the husband (professional work; at home) and for the wives (professional work; at home) and the combinations that result from the four possibilities in the concrete cases. In Gerhardt's study, four types result from this: dual career (both professionally working), traditional (husband working, wife at home), rational (reversed when the husband can no longer work professionally) and unemployment (when no one is working). Gerhardt has compared these four types to see in which circumstance rehabilitation of the chronically ill husband was most successful.

The next step in the construction of a typology is to analyze substantive meanings. Therefore, you will again analyze the cases in the different types for which meanings for one's own practices can be identified in the interviews and which regularities become visible for this.

Finally you will characterize the constructed types, exploring which features or combinations of features characterize the cases that have been allocated to the various types: what do they have in common, what distinguishes the cases in the different types? It may be necessary to remove cases strongly deviating from the single type, to further combine groups in order to reduce the variety, or to differentiate into more groups in the case of strong differences within the types constructed so far.

This procedure involves analyzing cases systematically, comparing them, and defining a typology. The typology may refer to the cases as a whole, which means to allocate for example interviewees to the different types. It may also refer to specific topics, which leads to a typology of how the interviewed adolescents manage sexual risks in their street lives and to a typology referring to their utilization of medical support in the case of health problems. The allocation of the interviewees to these two typologies will not necessarily be identical.

Checklist for Analyzing Data

If you conduct an empirical project, it will help to consider the questions in Box 8.4 for the analysis of your data. These questions can be used for doing your own study or for assessing the research of other researchers.

BOX 8.4

Checklist for data analysis

1. Is the method of analysis you chose appropriate to the data you collected?
2. Does it meet the complexity of the data?
3. Does the nature of the data permit you to apply the analytic structure that you chose?
4. Does the kind of analysis allow reducing the complexity of the data in a way that the results become easily understandable?
5. Can you answer your research question with the form of analysis you chose?
6. What is the research question or the aspect of it that is intended to be the focus of the analysis?
7. Can your analysis assess whether your result came up by chance or if it is a singular result?
8. Are your quantitative results statistically significant?
9. Do any regularities (e.g. a typology) become visible in the qualitative results?
10. How does your analysis consider deviant cases or data?

Case Studies

Case studies focus on collecting information about a specific event or activity – often a particular firm or industry. The logic of conducting a case study is that in order to obtain a complete picture of the entire situation one must examine a real-life example. This enables the researcher to identify interactions between all the variables in a real-life setting.

Several decisions are necessary in case studies. The first is the unit of analysis. That is, what will be the focus of the study? Will it be the company as a whole, a division of the company, a particular department, or perhaps even a project that is being implemented by the company. A second decision is the time frame to be studied. When does the study period begin and when does it end? Incorrect decisions on either of these issues could invalidate the study's findings. When comparisons are made of one company, event or activity, the situation becomes even more complex. For example, it would not be appropriate to compare a family business to a publicly traded one, just as it would not be appropriate to compare a situation in the year 2007 with one that occurred in 1997. Comparisons are necessary, but the situations must be comparable.

12

APPROACHES TO QUALITATIVE RESEARCH

Many approaches are available to conduct qualitative research. Four of the most widely used are discussed in this section.

Phenomenology is a qualitative research method that studies human experiences and consciousness. It is the study of "phenomena", or how things appear in our experiences, the ways we experience things, and therefore the meanings things have in our experiences. Phenomenological studies examine conscious experiences from the first person (interviewer or observer) point of view, and ranges from experiences involving perceptions, thoughts, desires, memories, emotions and imagination to bodily awareness and social interactions. These studies sometimes are referred to as "lived experiences" because they focus on how human behaviour is shaped by relationships with one's physical environment, including objects, people and situations. A specialized field of phenomenology is **hermeneutics**, which attempts to understand and explain human behaviour based on an analysis of stories people tell about themselves.

Ethnography is the qualitative description of human socio-cultural phenomena, based on field observation. An ethnographic approach typically focuses on a community of individuals, selecting participants expected to represent an overview of the activities of the community. The community is not necessarily based on geography, and can be defined in terms of an individual's work or leisure-time setting, or some other criteria. Data is collected by a participant-observer, who actually becomes part of the community and observes other participants. Nonobserver participants are asked to identify other individuals representative of the community, and snowball sampling is used to obtain a sufficient number of individuals to represent all areas relevant to the investigation. Participants are interviewed several times, using information from previous participants to obtain clarification and deeper responses when interviewed the second, third or perhaps fourth time. Typical questions asked include: "What is happening?" and "Tell me about what is going on here?"

Grounded theory is a process involving a set of steps that if carefully executed is thought to "guarantee" that the outcome will be a good theory. Thus, the general goal of grounded theory research is to construct theories in order to understand phenomena. The researcher poses questions about how experiences change over time or what the stages of change are, and thereby creates, elaborates on, and sometimes validates theory. Examples of questions used in a grounded theory approach include: "Tell me about the process of..." and "How is this different from...?" Grounded theory procedures are neither statistical nor quantitative, and begin by focusing on an area of study and then gathering data from a variety of sources, including respondent interviews, observation, field notes or diaries. Once gathered, the data are analysed using coding and theoretical sampling procedures. When completed, theories are generated based on interpretive procedures and summarized in a report. Although grounded theory has been developed and principally used within the field of sociology, it also has been used successfully by researchers in a variety of different disciplines, including business, education, medicine, political science and psychology.

Case studies are a documented description of a particular person, group, organization, activity or event. Actions taken by individuals or groups in the case are described, and their reactions, responses and effects on other participants are compared in order to draw conclusions. The main event or activity is described extensively but smaller events may be highlighted for their relevance. Data are typically obtained from personal interviews, focus groups and/or company histories. Rather than

using large samples and following rigid procedures to examine activities or variables, case study methods involve an in-depth, longitudinal examination of an activity or event, referred to as a case. Case studies provide a systematic way of looking at events, collecting data, analysing information, and reporting the findings. By conducting case studies researchers hope to gain a better understanding of why an event happened as it did and what might be important to look at in future research. Case studies enable researchers to learn about complex events through extensive description and contextual analysis. They most often are used to develop hypotheses rather than to test them.

The Research in Action box provides an example of how observation can be used to collect qualitative data.

13

SUMMARY

■ Clarify when qualitative research is best at achieving your research objectives

A qualitative research approach is the most appropriate and indeed the only way of achieving some research objectives, including: (1) where little is known about a research problem or opportunity; (2) where previous research only partially or incompletely explains the research question; (3) if current knowledge involves complex or evolving phenomena that need to be organized or simplified to examine further; (4) if the researcher needs to more fully understand phenomena to clarify patterns and themes; and (5) if the primary purpose of the research is to propose a conceptual/theoretical framework that represents current reality and could eventually be tested with quantitative research.

■ Understand the different approaches to conduct qualitative research

Many approaches are available to conduct qualitative research. Four of the most widely used are phenomenology, ethnography, grounded theory and case studies. Phenomenology is a qualitative research method that studies "phenomena", or how things appear in our experiences, the ways we experience things, and therefore the meanings things have in our experiences. Ethnography is the qualitative description of human socio-cultural phenomena that typically focuses on a community of individuals, selecting participants expected to represent an overview of the activities of the community. Grounded-theory is a process involving a set of steps of carefully executed is thought to "guarantee" that the outcome will be a good theory. Thus, the general goal of grounded theory research is to construct theories in order to understand phenomena. Case studies are a documented description of a particular person, group, organization, activity or event. Actions taken by individuals or groups in the case are described, and their reactions, responses and effects on other participants are compared in order to draw conclusions.

■ Explain the importance of managing qualitative data

Qualitative data generally originate from two sources – field generated data and found data. Field generated data typically come from interviews or focus groups in the field and consist of words and phrases in textual format. In contrast, found data are from existing sources like newspaper articles, speeches, diaries, advertisements, audio and video records, and so forth. Data management presents different challenges depending upon the source of the qualitative data. Field generated data typically comes from interviews or focus groups in the field and consists of words and phrases in textual format. In contrast, found data are from existing sources like newspaper articles, speeches, diaries, advertisements, audio and video records, and so forth. Data management presents different challenges depending upon the source of the qualitative data. Field generated data must be transcribed into a textual format to enable qualitative analysis. Researchers differ in their resources, assumptions and objectives, and what is actually transcribed into text will differ depending on each of these. Qualitative researchers using field generated data must consider this issue when designing their study and incorporate methods to minimize error.

The issue of what is actually analysed in qualitative research can be difficult for found data too because society is producing so much data, and the search techniques have improved so much, that it is impossible to include even a small portion of what is being generated about a particular topic. Managing data in qualitative research is important because decisions made early in the process of conducting qualitative research about how to manage the data can have consequences later in the study.

MYSTERY SHOPPERS OBSERVE WHETHER HOSPITALITY PROVIDERS HAVE STANDARDS

In recent years, competition has been strong among luxury hotels. To ensure that their facilities meet customers' expectations, hotel chains and other hospitality businesses have been hiring consultants to check them out. Registering under assumed names, these mystery shoppers act like eccentric guests, examining and reporting on service, staff competence, cleanliness, food quality, responsiveness, and so on. For example, they typically check out the rooms, order room service, eat in the restaurant, ask advice from the concierge, and visit toilets in public areas. In fact, one of the interesting findings is that the men's rooms in public areas are typically cleaner than the women's, probably because most hotel managers are men and therefore visit the men's toilet more often. The goal of these consultants is to help hospitality providers to transform their business so they are truly guest-centered, exceeding customer expectations, providing memorable experiences, and encouraging loyalty.

Which qualitative approach is used to collect these data? How should patterns or themes be identified in the analysis phase? Could the identified themes impact data collection?

Sources: http://www.hotel-online.com/News/PR2005_1st/Jan05_StandardsReview.html, <http://www.hospitalityperformance.com/>, accessed June 2006. ■

Coghlan, D. & Brannick, T. (2005) Doing action research in your own organisation, London, Sage

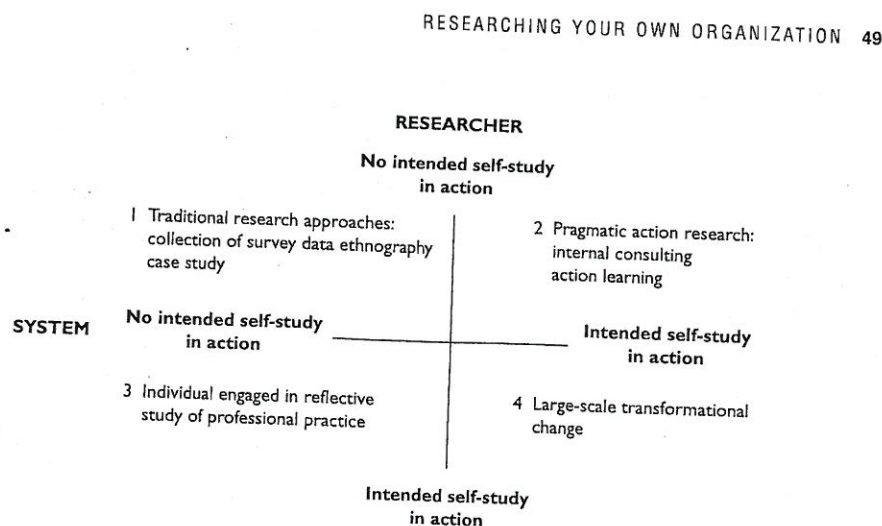


FIGURE 4.1 FOCUS OF RESEARCHER AND SYSTEM

What can case study research achieve?

Having arrived at a basic idea of what case study research is, it is now useful to understand what case study research can achieve. It has been described as having two outstanding strengths (Meredith 1998), both of which echo the definitions and views of the key contributors to case study research design:

- The phenomenon can be studied in its natural setting and meaningful, relevant theory generated from the understanding gained through actual practice.
- The case method allows the questions of why and how to be answered with a relatively full understanding of the nature and complexity of the complete phenomenon.

Case study research is ideal for looking at research questions which are closely connected to their context or situation, which in business is particularly appealing. Research questions of problems can be explored from perspectives that could be industry-specific, geographical location or size/type of business such as entrepreneurial or creative. Different functions such as accounting, operations or marketing can be investigated. For example, a study into working time regulations was conducted in the hospitality industry across two cases and uncovered the existence of accidental compliance with the regulations (Hurrell 2005). The first point refers to how theory can be generated from this understanding. Research is concerned with theory and how each study in some way contributes to theory in a given area. It is perhaps a weakness of the definitions cited earlier that neither mention theory when case study researchers go to great lengths to demonstrate how their research contributes to theory.

By understanding the capabilities and scope of a case study, the researcher will be able to develop the rest of the research. The aim of case study research is to dig deep, look for explanations and gain understanding of the phenomenon through multiple data sources and through this understanding extend or test theory. The value of case study research for business is that it allows the researcher to examine a problem or question in a practical, real-life situation. Readers of case studies expect a compelling argument for the choice of the case study research approach. For business, the advantages of this situational approach of case study research are significant. Case study research is particularly suitable for description, explanation and exploratory research or, as Yin (2009) suggests, case studies explain, describe, illustrate and enlighten. Stake (1995) argues that the real business of a case is particularization and understanding the case itself. Case study research is versatile in that the variety of data collection methods at the disposal of the case study researcher can be adapted to particular situations and conditions. In a larger organization, for example, it may be quite feasible to collect data using a survey of staff. Smaller organizations may lend themselves to a study of their documents and archives or in-depth interviews. As case study research usually involves a number of different data sources and methods, further insight is gained from considering the question from a multi-dimensional perspective. If there are multiple data sources, where does case study research fit in the research design? In this book it is argued that case study research is a research strategy, that is, it is the overall direction of the study upon which the rest of the research rests. Table 1.1 illustrates how case study research compares with other research strategies.

This comparison is useful in illustrating what case study research is not as well as what it is. Experiments and cases studies share the characteristics of a small number

Table 1.1 Comparison of case study research with experimental and survey approaches

Experiment	Case study	Survey
Small number of units	Small number of units (sometimes one)	Larger number of units
Data collected and analysed about small number of predetermined features of each unit	Data collected and analysed about large and often not predetermined features of each unit	Data collected and analysed about a small number of features of each case
Study of units organized in such a way as to control variables of interest	Interest in naturally occurring features or the variables in context	Units selected to represent characteristics of the study's population
Data usually quantified	Data can be quantitative, qualitative or both	Data usually quantified
Aim is of testing theory or evaluation of an intervention	Aim is to understand and theorize through enfolding the literature	Aim is to generalize findings from sample to population

Adapted from Gomm et al. (2000)

of units but they diverge in how the data are collected and analysed. Experiments are more concerned with relationships between variables, which are usually defined in advance. According to Collis and Hussey (2009), the aim in an experiment is to manipulate the effect of an independent variable on a dependent variable. For a survey, the aim is usually to measure key variables in a sample that represents a larger population and to generalize the findings of the survey to this larger population.

One or more than one?

As you will have seen above, the aim of case study research is not to make statements about the cases to a larger population but to explore in depth a particular phenomenon in a contemporary context. Nonetheless, an enduring question for researchers in case study research is how many units of study they should choose for their case study research. This question is not readily answered as it depends on a number of considerations which will be discussed more fully in Chapter 3. For the time being the following research insight is an example of the process one student went through in finalizing the number of cases.

Research insight: how many?

Frederick wanted to study tourism from the perspective of authenticity. The key question was how best to study the phenomenon of authenticity in tourism. He considered a number of possible cases to study this question. For quite some time, the study was going to consist of two units. Eventually Frederick settled on the single unit of South Africa so that he could illuminate the unique features of the case and how the research question could be addressed through this particular case.

16

Triangulation, as mentioned in Chapter 1, is a critical part of many case study designs. It is a term derived from navigation and surveying where an area is divided into triangles, one side (the base line) and all angles of which are measured and the lengths of the other lines calculated trigonometrically (<http://dictionary.reference.com>). The following extract provides further description:

Triangulation is based on finding an unknown location using angle measurements to two known locations. Mathematically, the two known positions define the two vertices (and length of the one side) of a triangle and the two bearing measurements define two of the angles of the triangle. These three things fix the size and orientation of the triangle; thus putting the unknown position at the third vertex of the triangle.

(www.ion.org/satdiv/education/lesson6.pdf)

The principle in case study research is getting a fix on the phenomenon or, as it is referred to in the extract above, 'the unknown position' from two or more other points. This fix can be achieved through using the different methods and informants or even theory triangulation (Denzin 1978). The assumption underlying triangulation is multiple and independent measures (or other data) provide a more 'certain portrayal' of the phenomenon that is being studied (Jick 1979). However, there is more than one type of triangulation and Table 3.5 captures four main types of triangulation.

The first type of data triangulation consists of gathering data from different sources, for example interviewing managers and staff over a period of time in an investigation into organizational response to change. The same method of interviewing is used but with different sources of data. The second type of triangulation involves more than one researcher. An example of this type of triangulation might be a large funded

Table 3.5 Types of triangulation

Type	Description
Data	Data gathering from different sources, possibly at different times on the same object
Investigator	Use of more than one researcher in gathering and interpretation of data with same objective
Theoretical	Use of more than one theoretical perspective in the interpretation of a single data set
Method	Within-method (multiple techniques with same method) or between-method (different methods) with same object

Compiled from Denzin (1978), Jick (1979) and Wang and Duffy (2009)

research project where a team of researchers were involved in a multiple-case investigation into accounting systems. In theoretical triangulation, greater insight may be gained from looking at a data set from a number of theoretical perspectives. The final type of triangulation is methodological which, as the table indicates, is either within-method or between-method. Within-method triangulation consists of multiple techniques within a given method, for example several focus groups. Between-method triangulation uses different methods which might consist of a survey of an appropriate sample and analysis of documents. It is this version of triangulation which is particularly common in case study research. The following research insight provides an example of methodological triangulation.

(18)

Research insight: triangulating methods

A study into relational benefits in a football club adopted a single-case study approach (an extreme case) where a small club had been able to win various awards for family engagement. The data were generated from two main sources. First, there were interviews with the families who participated in a range of club activities. Secondary data about the club were accessed from the Football Association website and publications, consultancy reports and the club's own information about attendance and participation. The researchers were able from the two data sources to illustrate and extend theory into the third point in the triangle: family relational benefits in football.

Findings from different data sources saying the same thing provides the researcher with a basis for arguing that the research is credible. As Jick (1979: 603) argues, 'triangulation can capture a more complete, holistic and contextual portrayal of the units under study'. The data sources that are intended to support your research need to be mapped early in the research planning. For example, how will findings from a survey complement data generated through focus groups (between-methods triangulation)? What outline procedures have you in place for analysing these quite different data sources? What is the enveloping methodological approach that will allow you to argue for the consistency of your research? This final one is critical, as it provides the firm foundation for the whole of your enquiry which, like the spine discussed earlier, holds the study together.

Rather typically with research methods and underpinning philosophies, there is some controversy. Yin, in showing how evidence converges, states that it contributes to establishing 'facts' (2009: 118) but facts are something of an anathema to an interpretivist researcher, becoming all too close to a view that there is some objective reality. This notion is reiterated by Lee and Lings (2008) who argue that the principle of triangulation which is drawn from natural sciences and hence a positivist stance assumes that there is an external reality on which you can get the fix on your phenomenon. Where does this leave the researcher, especially the interpretivist one? It does not necessarily mean that you cannot argue for the credibility of your research using triangulation but it does signify that you have to be aware of the underlying philosophical arguments in research and provide an account of why triangulation has allowed your largely interpretivist study to be credible. This point will be returned to in Chapter 6.

It would be a mistake to take the view that once ethical approval has been gained for your research that you can forget about ethics. As Figure 4.1 demonstrates, adhering to ethical principles continues and permeates every aspect of your research. p62

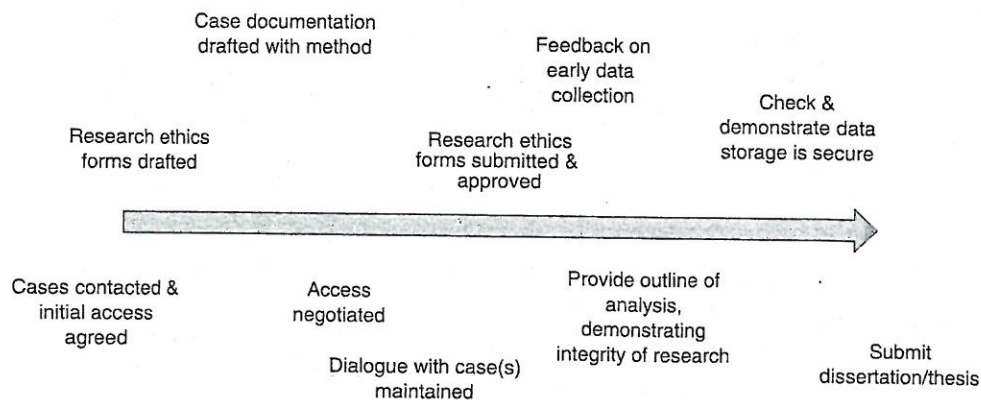


Figure 4.1 Continuity of research ethics

As always in attempting to depict processes in research, the process often appears linear when, probably, you will find that there is repetition and interruption in the process. For example, you may receive feedback on your research ethics application which could involve a re-draft. By following a model as shown in Figure 4.1, the honesty and integrity of your research is apparent throughout. (19)

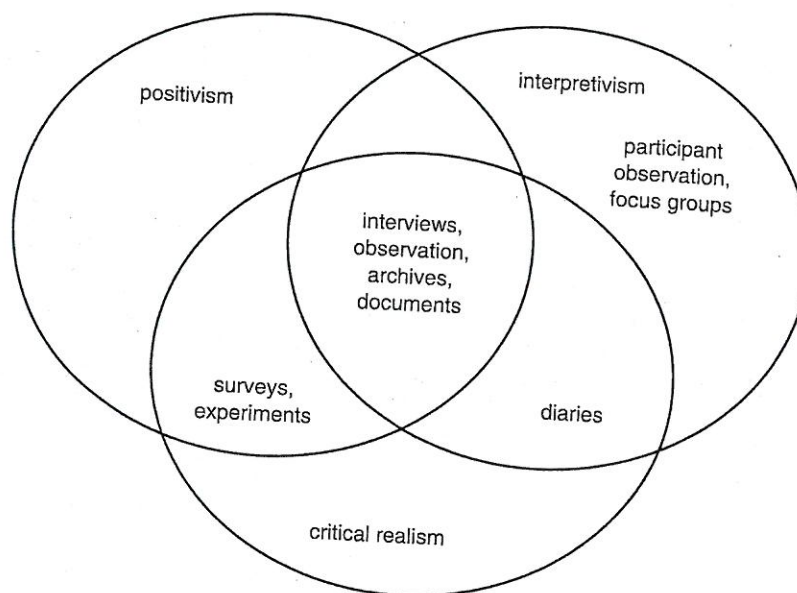


Figure 5.1 Embedding your methods in epistemological approaches

Table 5.2 Qualitative and quantitative data sources for case study research

Data	Qualitative data sources	Quantitative data sources
Primary	interviews (face to face, phone, online) focus groups, participant observation, diaries	survey, observation, experiment
Secondary	minutes of meetings, internal reports, consultancy reports, market research reports, government and EU data	spreadsheets, graphs, annual reports, external statistics, panel data, UK and EU data

Primary data are new data which have been collected directly by the researcher(s) from original sources (Easterby-Smith et al. 2008; Remenyi et al. 1998) and specifically for the research project (Saunders et al. 2007). In collecting primary data, the researcher is aiming to generate new insights into the research question(s) with fresh data. Students also gain knowledge into the rigour of research methods which provides them with the lifelong skill of being able to interrogate data sources and evaluate research thoroughly. The strength of case study research is its capability of studying a research question or problem in depth and in context, therefore the data collection procedures should overall complement this characteristic. Although case study research is sometimes thought of as being a research strategy that consists of qualitative data, this strategy can actually employ various data collection procedures for within-case and cross-case comparison (Dooley 2002). As we have seen, case study research can be embedded in at least three research traditions (Figure 5.1), lending itself quite legitimately to quantitative and qualitative data collection. In this section, we shall be reviewing the various techniques that a case study researcher can use to collect primary data.

Figure 5.2 depicts three possible techniques for collecting primary data suitable for case study research: survey, observation and interview. Each technique is ostensibly 'neutral', therefore lending itself to quantitative or qualitative data collection, depending on how it fits with the overall research approach (see Figure 5.1). For each technique, you will need to develop an instrument, that is, the means by which you will collect your data. The research instrument also demonstrates that you have followed accepted protocols in your data collection and how you argue for the rigour of your data. Examples of a research instrument include a questionnaire, a guide for interviews or focus groups or an observation guide. Instruments designed to collect quantitative and qualitative data will usually differ in the degree of structure, for example a research instrument for a survey, usually referred to as a questionnaire, will be highly structured, requiring the respondent to answer closed questions (yes/no/I don't know). The qualitative version of a survey may have open questions where the respondent may use their own words in answering the questions.

To try and make life a little simpler, we shall discuss quantitative and qualitative data separately and, in the discussion, the various means of data collection have been assigned according to the most common way in which they are used.

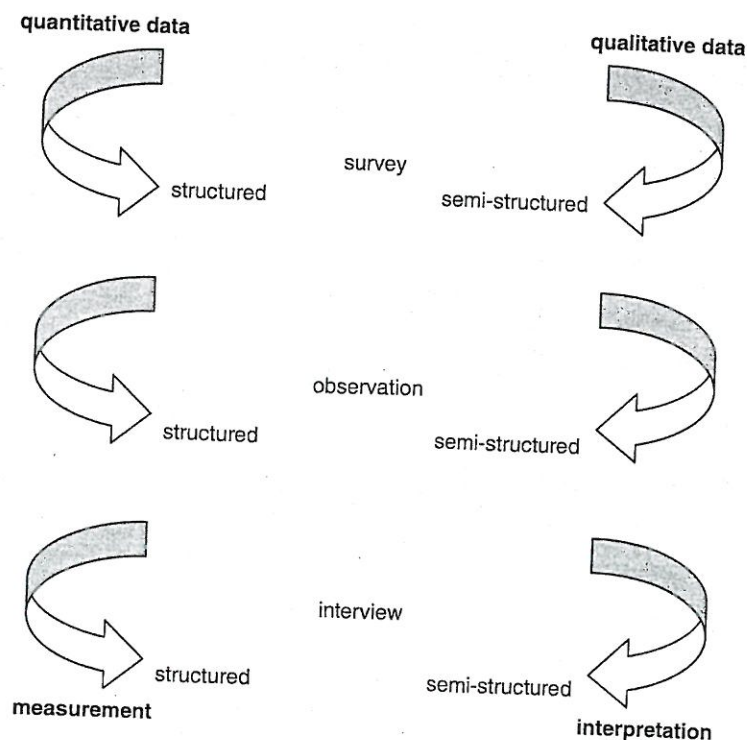


Figure 5.2 Research instruments for primary data

Triangulation

Triangulation is a key concept in case study research, especially with reference to triangulating data sources or data methods. As case study research can consist of multiple data sources or multiple methods, there is a need to bring these various sources together at some stage, which Yin (2009: 115) describes as 'converging lines of enquiry'. Using multiple methods occurs widely in research, many quantitative studies are preceded by an exploratory qualitative phase (for example, Gwinner et al. 1998) or a survey can be followed up by in-depth qualitative investigation. In purely qualitative studies, researchers may argue for the credibility and trustworthiness of their findings on the basis of triangulation (Robson 2002), such as interviews and focus groups. It is argued that if two or more sources provide similar perspectives, then they can to some extent cross-validate each other. The combination of qualitative and quantitative data into a study of the interrelationships between work perceptions and a computer information system enabled the researchers to resolve inconsistencies in their research findings (Kaplan and Duchon 1988). Like everything else in research, planning how you are going to triangulate your data is essential. Just hoping that various data sets will triangulate themselves is not going to convince the reader/examiner.

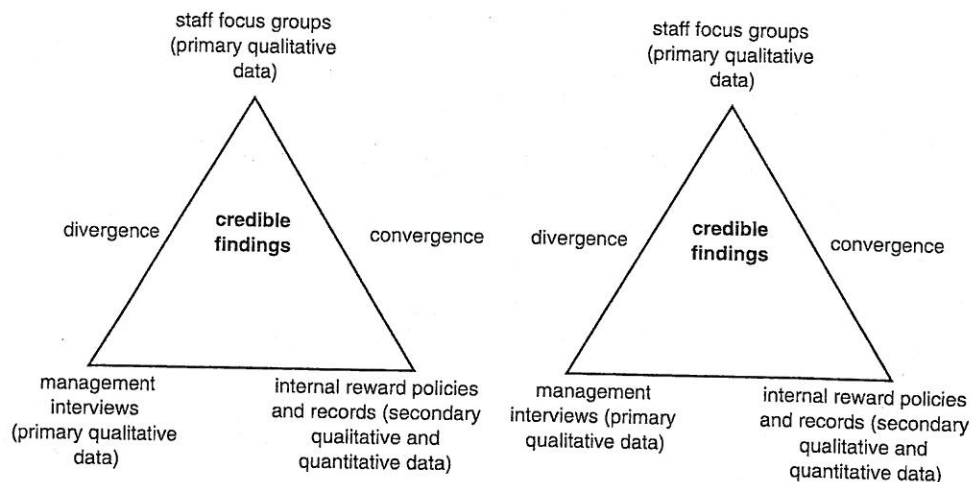


Figure 5.3 Triangulating data

When you are drawing up your data collection procedures for the case study, you will have to incorporate into the design how you will triangulate the data from each of the sources that you have accessed, as well as the cases that you have investigated. Figure 5.3 provides an illustration of mapping three data sources as triangulated in a study of two cases. As shown in Table 5.1, you should aim to have similar data sources in each case. In Figure 5.3, you will note that statements about reality or fact have been avoided and that the convergence (or divergence) of data instead provides the basis for the 'credibility' of the findings.

The analysis of the data that will form the basis for triangulation will be presented in Chapter 6.

An important concluding remark for this chapter on data collection is that more data are not necessarily better. As Figure 5.3 shows, the quantity of data increases with the more cases that you study. The reader/examiner would much rather see small but well-constructed data sets that are aligned to your research objectives. Research tends to get more complicated as you work through the process and a good maxim is to try to keep it all as simple as possible. Sprawling data sets are likely to cause problems in analysis and interpretation.

Summary

- Case study research consists of multiple sources of data or evidence but more is not necessarily better.
- These data can be primary and/or secondary and qualitative and/or quantitative but must be consistent across the cases.
- Data sources need to be chosen systematically and in accordance with research objectives.
- Data analysis needs to be planned at the same time as data gathering, whether quantitative or qualitative.
- Triangulation is a means of establishing credibility in your case study research findings and how the data are going to be triangulated is part of the data-gathering process.

22

Research insight: triangulating findings

Maria was investigating how ingredient branding was adopted as a strategy in recovering a corporate failure through a case study. She had two sets of data for her single case study: interview data from senior managers and secondary data reporting responses to marketing communications. She conducted an initial analysis of each data set using a priori codes developed from the literature. She then began to evaluate the findings from both data sets. Was there support for the a priori codes and themes in the secondary data, for example strategic relationships? There was convergence in both data sets for most of the themes. However, there wasn't support across the data sets for all of the themes, hence a further examination of the data sets was conducted and yielded a more insightful explanation and hence contribution to theory.

Managing and Analysing Data

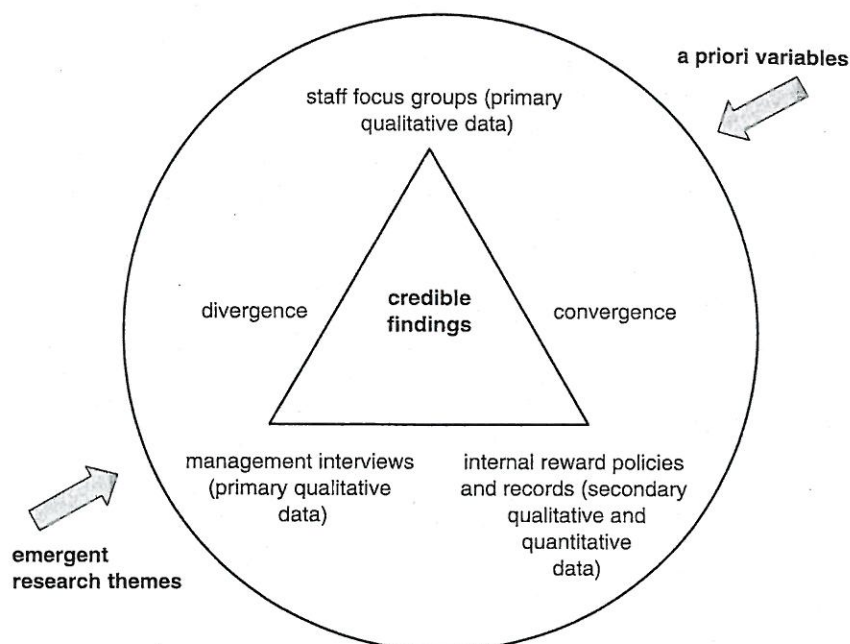


Figure 6.1 Analysis in triangulation

Table 8.1 Abstract template

Abstract section	Content
Purpose	Tells the reader succinctly what the research sets out to do with concise reference to theory.
Method	Provides overview of approach, strategy, data collection and analysis.
Findings	Summarizes what the data collection/analysis tells us.
Implications	Indicates the relevance of your research to managers, policy makers or practitioners.
Contribution	Provides detail on how the findings take research in the area forward, including suggested areas of further research.

Writing and Presenting Your Research

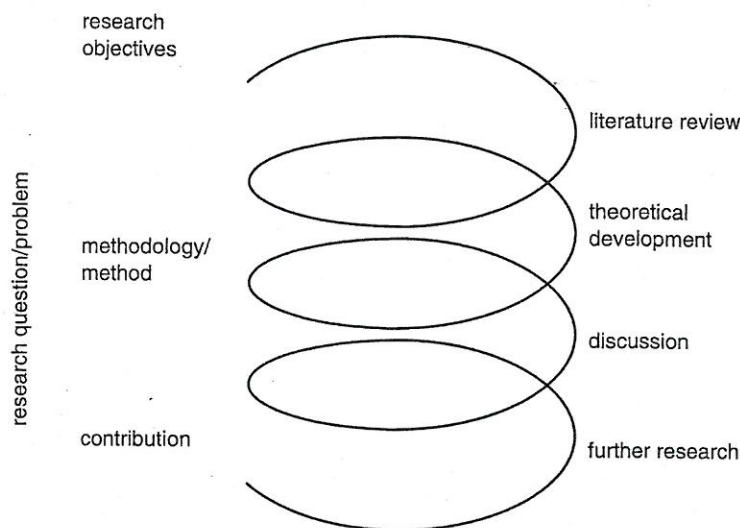


Figure 8.1 Research core

Table 8.2 Structure of methodology/method chapter

Heading	Typical content
Introduction	Statement of chapter contents, reiteration of research question/problem and objectives, following up on concluding comments of the preceding chapter (literature review), leading into the next section on methodology
Methodology	Philosophical foundations of the study such as interpretivist traditions, implications of methodological stance on method, leading into the research strategy
Research strategy	Case study research, how many cases, embedded, comparative, selection criteria, leading into ethics and access
Ethics and access	What ethical issues arose from the research strategy? How were they addressed? How was access negotiated and led into data collection?
Data collection	Careful explanation and presentation of multiple data sources using diagrams to assist reader understanding. Detail of informant selection, interview guides, focus group prompts, how questionnaire items were developed and measured. Very precise details of secondary data sources and how they were evaluated, leading into analysis
Data analysis and triangulation	Detailed explanation of how each data source analysed, followed by section on triangulation (data)
Research quality/credibility	How the data and findings of research were evaluated according to appropriate (to methodology) criteria
Conclusion	An evaluation or reflection of the methodology/method in the study. Providing a bridge into the following chapter on findings.