

Chapter 15

Doing Case Study Research

Robert W. Scapens

Introduction

In recent years, case studies have become a popular method in accounting research, and accounting case studies are now to be found in a wide range of research journals. As editor-in-chief of *Management Accounting Research* I have encouraged the use of case studies and in the journal's first ten years (1990–1999) 24% of the papers used case study research methods, and a further 13% used field studies (see Scapens & Bromwich 2001). Nevertheless, case studies remain a controversial subject and various questions, both methodological and practical, need to be raised about their use in accounting research. In this chapter I will explore some of the practical questions that need to be addressed by case study researchers.¹

Case studies are sometimes thought to be the easier alternative when compared to quantitative accounting research, which requires mathematical expertise and knowledge of statistics. However, having taught research methodology to graduate students for many years, and having undertaken both quantitative research and case study research in my career, I can certainly agree with Yin (1984: 26) that: “Case study research is remarkably hard, even though case studies have traditionally been considered to be ‘soft’ research. Paradoxically, the ‘softer’ a research technique, the harder it is to do.” Considerable thought needs to be given to the design of case study research and to the practicalities of conducting a case study. In this chapter I will draw on my own experience in doing case studies and in supervising doctoral students conducting their own case studies. Specifically, I will explore various practical issues that need to be

¹ This chapter will draw on material that appears in the chapter on “Methods of case study research” which I wrote for Ryan *et al.* (2002). Here I will focus on the practical issues and add illustrations drawn from my own case study research. Readers interested in the methodological issues surrounding case study research are urged to read Chapter 8 in Ryan *et al.* (2002).

addressed by case study researchers. But first it may be helpful to explain how I came to start using case study research methods.

In the 1980s management accounting researchers began to explore the gap between management accounting theory and practice (see Scapens 1984, 1985). Previously it had been assumed by researchers that once practitioners understood the 'theory' (largely based on quantitative techniques informed by neo-classical economic theory — see Arnold & Scapens 1986) they would change their practices. However, it was increasingly recognised in the 1980s that despite exposure to the new management accounting theory, practices were not changing. Furthermore, researchers understood little about the nature and determinants of management accounting practices, other than a general awareness that they did not conform to the prevailing management accounting theory. Some researchers responded by undertaking surveys of management accounting practices — to establish the nature of those practices — and others began conducting case studies (see Cooper *et al.* 1983 and Scapens *et al.* 1987).

Initially, my response was to adapt the economics-based mathematical modelling approach, which I used in the 1970s to study financial accounting issues (see Scapens 1978). I had already adapted this modelling approach to study the nature of residual income in divisionalised organisations (see Scapens 1979). In the early 1980s I drew on this model to provide the theoretical underpinnings for survey-based research, aimed at explaining the management accounting practices of divisionalised companies in the U.S. and the U.K. However, despite a large sample of both U.S. and U.K. companies, and the use of some of the more sophisticated mathematical and statistical techniques available at the time, I was unable to find any of the predicted relationships. The only really significant finding was the lack of any significant correlations (see Scapens & Sale 1985). It was the failure of this quantitative study to explain management accounting practices that led me to look for other ways of understanding management accounting practices, and thus I started to use case study research methods. Nevertheless, the objectives of my research remained the same — to explain management accounting practices — although the theoretical approaches which underpinned the research also changed. Initially, I used Giddens' structuration theory (see Roberts & Scapens 1985, and Macintosh & Scapens 1990), and more recently institutional theory (see Burns & Scapens 2000). Over the years I have continued to use case study research methods, but the focus of the research has shifted to understanding the processes of management accounting change.

My experience in conducting case research certainly confirms Yin's view that case study research is remarkably hard. It is not just a matter of going to visit companies and writing up the results, as some critics seem to believe. Case study research requires clear research questions, a thorough understanding of the existing literature, a well-formulated research design with sound theoretical underpinnings, and above all excellent language skills. Whereas quantitative researchers use mathematical skills in their research, language skills are essential for case study researchers. They must be able to communicate with both the subjects of the research and the readers of their research reports and papers. They must also be able to synthesise large amounts of quite diverse data, such as interview notes and transcripts, documents, observations of meetings and

so on, and from all this data produce theoretically informed and convincingly argued conclusions.

In this chapter, I will begin by identifying some of the different types of case studies and then discuss the issues to be considered in selecting suitable cases. I will continue by setting out the main steps in a case study. The chapter will be completed with a discussion of writing up case study research and getting it published.

Types of Accounting Case Study

It is important to start by recognising that case studies can be used in a variety of different ways in accounting research. The following are some of the types of accounting case studies. However, the list is intended to be neither definitive nor exhaustive. It merely seeks to indicate some of the different ways in which case studies can be used.

Descriptive case studies: these describe accounting systems, techniques and procedures used in practice. A number of companies may be selected as cases to describe different accounting practices or the similarity of practices in different companies. Descriptive case studies were particularly useful in the 1980s as researchers attempted to provide descriptions of management accounting practice (see Scapens *et al.* 1987). Then and subsequently such studies have often been funded by professional accounting bodies because they appear to offer the possibility of determining ‘best’ practice — sometimes conceived as the most common practice and sometimes as the practice adopted by ‘successful’ companies. However, such studies beg the crucial question of what constitutes ‘best’ practice and ‘successful’ companies. Nevertheless, such case studies are useful in providing information concerning the nature of contemporary accounting practices.

Illustrative case studies: in management accounting research (especially in North America), case studies have been used to illustrate new and possibly innovative practices developed by particular companies. For example, Kaplan (1986, 1998) has argued that accounting researchers can learn a lot from studying the practices of innovative companies. Such case studies provide an illustration of what has been achieved in practice. However, there is an implied assumption that the practices of these ‘innovative’ companies are, in some sense, superior to the practices of other companies. An illustrative case study cannot provide a justification for, nor can it test the validity of, this assumption.

Case studies can also be illustrative in the sense of providing a Weberian ‘ideal-type’. These are case studies which provide empirical exemplars of the embodiment of particular theories. They are not intended to illustrate practices that are necessarily superior to others. Instead, they provide illustrations of the way in which particular theoretical categorisations can be observed in practice.

Experimental case studies: accounting researchers frequently develop new accounting procedures and techniques that are intended to be helpful to accounting practitioners. Sometimes, however, it can be difficult to implement the researchers’

recommendations. An experimental case study could be used to examine implementation problems and to evaluate the potential benefits. Such cases would have been very helpful in the 1970s when researchers were developing sophisticated management accounting techniques — few of which were ever used in practice. Experimental case studies would have indicated the difficulties of implementing the proposed techniques. More recently, however, researchers have been conducting case studies to explore the implementation and use of new techniques — for example, de Haas & Algera (2002) used an experimental case study of a Dutch Steel Company to examine how new techniques can be used to stimulate goal congruent behaviour.

Exploratory case studies: the critics of case study research sometimes argue that, although case studies can be useful in exploratory research, larger scale studies are needed to generalise the findings. Such critics seem to have in mind exploratory case studies, which are used to explore the possible reasons for particular accounting practices and to enable the researcher to generate hypotheses that can be tested subsequently using survey methods and quantitative techniques. As such, an exploratory case study represents a preliminary investigation, which is intended to generate ideas and hypotheses for rigorous empirical testing at a later stage. The objective of the subsequent research being to produce generalisations about accounting practices. From this perspective, exploratory case studies are only the first step in the research — the important hypothesis-testing phase of the research comes later. Case studies of this type frequently contain an ‘apology’ that the research is only exploratory and cannot be generalised, as the case represents only a small sample.

Explanatory case studies: it is when we come to these case studies, which are the type that I use in my own research, that we see the real potential of case study research. Explanatory case studies attempt to explain the reasons for observed accounting practices. The focus of the research is on the specific case. Theory is used in order to understand and explain the specifics, rather than to produce generalisations. Theory is useful insofar as it enables the researcher to provide convincing explanations of the observed practices. If available theories do not provide satisfactory explanations, it will be necessary to modify them or to develop new theories, which can then be used in other case studies. The objective of the research is to generate theory that provides good explanations of the case.

The distinctions between these different types of case studies are not necessarily clear-cut. For example, it may not be clear which practices should be considered as innovative and the subject matter of illustrative case studies, and which should be regarded as existing procedures and the basis for descriptive case studies. Ultimately, it is the intention of the researcher that determines the classification. Furthermore, the distinction between exploration and explanation is rather ambiguous. An exploratory study, for instance, may be concerned with generating initial ideas that will form the basis of subsequent explanations of accounting practices. Despite such ambiguities, the above list gives an indication of the range of uses of case studies and the different emphases that researchers give to their work.

There is one distinction, however, which needs to be made clear, as it is important for the following sections of this chapter: that is the distinction between positive and

interpretive case studies.² Traditional accounting research has utilised a positive empirical methodology, which relies to a great extent on the methods and theories of neo-classical economics. Such research sees the world as essentially objective and external to the researcher, uses deductive reasoning and hypothesis testing, and sees the role of accounting as assisting economic decision-making. It is from such a methodological perspective that case studies are seen as largely exploratory, and used to generate hypotheses for later testing through large-scale surveys and statistical generalisation.

An alternative methodological perspective views the world as socially constructed and subjective. In researching such a world the researcher cannot step outside the social processes, and must seek to interpret accounting within its organisational, economic and social contexts. Here we see the importance of explanatory case studies, which seek to provide deep and rich understandings of the social nature of accounting practices. It is this type of case study, the interpretive case study, which I have used in my own research. Such case studies require an in-depth understanding of the company or organisation being studied. Furthermore, as my most recent research has focussed on processes of management accounting change, my co-researchers and I have undertaken longitudinal studies in which we have conducted interpretive case studies over longer periods of time — sometimes as much as five years. In the following sections of this chapter I will be referring to interpretive case studies, unless it is indicated otherwise.

The particular uses made of case study research methods will depend on the methodological choices of the researcher and the nature of the research; specifically, the research questions to be addressed. I will return later to the importance of clearly specifying the research questions, when I discuss the main steps in a case study. But in the meantime, some comments are needed on the selection of suitable cases.

Selecting Suitable Cases

Researchers, who approach case studies from a positive methodological perspective may fall into what Yin (1984: 39) calls “the trap of trying to select a ‘representative’ case or set of cases”. Such researchers, being concerned with generalising their findings, view case studies as a sample that, if correctly selected, may be used to generalise to a larger population. However, in such research it is not always clear what the selected cases are representative of — what aspect(s) of the population is the case supposed to represent? It may not be possible to answer this question until the research has been completed, particularly in exploratory case research. This can create problems for the selection of ‘representative’ cases.

Interpretive case studies, on the other hand, are used to develop and extend theory. Thus, the selection of cases should reflect the needs of theory development, rather than generalisation to some larger population.³ Cases should be selected so that the

² For an extended discussion of the distinction between positive and interpretive case studies see the chapters on *Alternative philosophies of accounting research* and *Methods of case study research* in Ryan *et al.* 2002 (Chapters. 2 & 8). Only a brief summary can be provided here.

³ Issues of generalisation (or transferability) in case research are discussed later.

researcher can focus on the questions to be addressed in the research. The research question(s), together with the theoretical framework that underpins the research, will define the characteristics of the cases to be studied, and the researcher should try to select cases that display those characteristics. Whereas the positive case researcher may be seeking representative cases, the interpretive case researcher may actually find it helpful to look for ‘critical’ or ‘extreme’ cases.

Where there is a well-formulated theory and the major research issues are clearly defined, it may be helpful to select a ‘critical case’ — i.e. a case in which the issues addressed in the research are brought into focus by some critical event which raises those issues to the surface in the organisation being studied. For example, in studying the nature of management accounting practices, I found it helpful to study organisations in which an event, such as a take-over or the appointment of a new chief executive, had caused management accounting systems to be re-examined. This was how my interest in management accounting change emerged. Initially, my interest was in the nature of management accounting practices *per se*, but I found it useful to study critical cases where management accounting practices were being scrutinised within particular companies — i.e. where management accounting change was taking place.

In situations where the researcher wants to extend a theory to cover a wider range of circumstances, it may be appropriate to select an ‘extreme case’. For example, such a case might involve studying as very large or a very small company, or a company that is in a totally different industrial setting. Such a case study would indicate the extent to which the existing theory can be extended to provide explanations in widely differing circumstances, and may identify the extent to which the theory needs to be modified if it is to be applied to a much wider set of instances. For example, although my research on management accounting change has focussed on large, usually multinational companies, it would be of interest to broaden the research to study management accounting change in public sector organisations that are in the process of being privatised, or to study management accounting change in very small companies. Such studies would involve extreme cases for the theoretical insights that I have developed in my case studies of large private companies.

This line of argument can be extended to situations where there is little available theory. Here an ‘exploratory case’ could be used to begin the process of theory development.⁴ The selection of the particular case for study may be relatively unimportant. What is needed is a relevant case that will enable the researcher to begin the process of theory development. Possibly, the case should be ‘simple’, in the sense that it avoids as far as possible complex issues, so that the study can focus on key issues — although it may actually be difficult to specify what these should be, before the study is undertaken. Nevertheless, when such ‘exploratory cases’ have been undertaken the initial theory can then be refined and extended as additional cases are studied by the researcher, or by other researchers. This brings us to the issue of multiple case studies.

⁴ Here I’m talking about an exploratory case that will begin the process of explanation. In a sense, it is still an explanatory case, as the objective of the research is to explain the case, albeit in a tentative way. This is quite different to the exploratory cases of positive researchers.

In a programme of case study research multiple case studies can be used for two purposes — replication and theory development. A number of similar cases might be selected to replicate the theoretical explanations. Alternatively, dissimilar cases may be selected to draw out implications from their comparison and/or to extend the theory to a wider set of circumstances. The differences between the individual cases will be determined by the direction in which theoretical extension is desired. The objective of such multiple cases is to develop a rich theoretical framework, capable of explaining a wide range of circumstances. It is important to recognise the difference between multiple case studies and field studies. Although some researchers refer to the latter as a series of case studies,⁵ their explanations are usually based on cross-sectional analysis of the entire set of organisations studied. In the former, however, each case is analysed separately and the explanations derived from the particular circumstances of the case; the theory is then extended to encompass all the cases.

Ideally, the selection of cases to be studied should follow a clear specification of the research questions and the theoretical framework for the research. The researcher can then use the points raised above in selecting suitable cases. However, in practice other problems may emerge, especially in research undertaken for a Ph.D., where the time and resources are severely constrained. The researcher may have to make use of easily accessible cases, and this may require some modification of the research questions and/or the theoretical framework. Furthermore, as the research progresses issues may emerge which were not anticipated at the outset. This could represent a problem as the researcher may not be able to address the intended research question(s), or it could be an opportunity as new, and potentially more interesting, issues can be addressed. In either case, the researcher should be prepared to modify the research questions as the research progresses and to refine and develop the theoretical framework. As will be pointed out later, case research does not follow a simple linear process — defining research questions, selecting a theoretical framework and then conducting the case research. It is often much more ‘messy’, with the researcher having to adapt as the case progresses.

The Role of the Researcher

In selecting a case study it is important to consider the role of the researcher vis-à-vis the subject(s) of the research. There is a range of possibilities with the researcher more or less involved in the case — it is only where the researcher is an ‘outsider’ that he/she has no direct involvement in the case. In all the other possibilities the researcher has the potential to influence the case. Concerns are sometimes expressed about ‘action research’, as the researcher is part of the process being studied and not independent of the case. But to varying degrees this criticism applies all types of case study research. Before discussing this issue further I will list some of the possible roles of the researcher.

⁵ Or ‘mini case studies’.

Outsider: here the researcher relies on readily available evidence, such as published reports and other such secondary sources. The researcher does not have any contact with and cannot therefore influence the participants in the case. But even here, the resulting case study is still subjective — the researcher selects and interprets the evidence. As with all other types of case study, the output is the interpretation of the researcher. Historical case research is often the best example of the researcher as an outsider. With contemporary organisations the case researcher will normally make at least some ‘site’ visits, which bring us to the next possibility.

Visitor: this is probably the most common image of the case researcher — someone who visits the case site, and interviews the subjects of the research. Although the researcher is not directly involved in the issues being researched, the act of asking questions about these issues can have an impact upon those who are the subject of the research. It is this role that I have tended to adopt in my case research, and I am conscious of the impact which discussing issues can have on individuals in the case. In one case, we interviewed the managing director and chief accountant who explained their reasons for not implementing ABC. But several months later, ABC was being more widely discussed in the company. Was this the influence of the research process? Quite possibly!

Facilitator: in this next role the researcher is closely involved in the case site, explicitly raising issues, giving advice and opening up options for the subjects of the research to evaluate. However, the researcher does not provide solutions, rather he/she enables the subjects of the research to recognise the nature of their problems and helps them to find their own solutions. For example, a few years ago a group of Scandinavian researchers worked with a number of small to medium sized companies studying the process of developing and implementing new management information systems.

Participant: a classical approach in sociological studies was for the researcher to actually work in the organisation being studied — for examples, see Gouldner (1954) and Dalton (1959). Working as a participant allows the researcher to obtain insights into the everyday workings of the company. In some of these early studies the researchers did not disclose the research agenda to those with whom they were working. They were simply employees of the company — but they maintained detailed records of their experiences. However, there are now strict ethical codes which place limits on this type of research.

Actor: in action research the researcher is a key player in the subject matter of the research — possibly introducing a new technique or procedure. As such, the researcher intervenes in the case and is an active participant in the issues being researched. A group of accounting researchers in Finland have been using such an approach to study the implementation of modern management accounting techniques — see Lukka (2000) and Kasanen *et al.* (1993), who term their research method the ‘constructive approach’.

When the researcher is an actor and intentionally intervenes in the case it is very clear that the research process influences the case study. But even when the researcher has a different role, he/she cannot be said to be independent of the case. The research process always has the potential to influence the case, except where the researcher is an outsider, and in all types of case study the output represents the interpretation of the researcher and is therefore inevitably subjective. Thus, it is important for such researchers to be

aware that case research cannot be a neutral and objective process. The concerns sometimes expressed about action research (i.e. about the involvement of the researcher) apply in varying degrees to all case research and the researcher must keep this in mind when undertaking the case study and writing up the results.

Main Steps in a Case Study

In this section I will describe the main steps in a case study, assuming that a suitable case has been selected and access arranged. Although the steps will be listed in what might appear to be a logical sequence, it has to be emphasised that case study research is complex and interactive, and cannot be characterised by a simple linear process. In the course of a case study, the researcher may have to iterate through these steps several times, possibly in different orders and with different interactions between the individual steps. Nevertheless, it is useful to list the various steps so that the main elements of a case study can be discussed.

Preparation

The first step in any research, and particularly in case research, is to specify as clearly as possible the research question(s) to be addressed. This will usually be done in conjunction with a review of the existing research literature. The research question(s) will then shape the research design, including the research methods and even the methodology. The question(s) should be sufficiently focussed to provide a feasible research plan, given the available resources, especially time. This is particularly important where the research is undertaken for a research degree, as the time frame may be constrained and other resources limited. Given a specification of the research question(s), it will then be possible to select the appropriate type of (case) research method, and to decide on the researcher's role in the case — see above.

Now, assuming the research question(s) has(ve) been specified, and the nature of the case and the involvement of the researcher decided, the available theories relevant to the case should be reviewed in order to draw up a checklist of things to look for in the study. This review of prior theory will determine the way in which the researcher approaches the case. It is sometimes suggested that the researcher should begin a case study totally unencumbered by prior theory. This is quite impossible. Every researcher will be influenced by his/her past experience, previous research, papers read and so on. Thus, in any (every) case study there will be prior theory, although much of it will be implicit. To make the research meaningful to others, the researcher should make explicit, and as comprehensive as possible, the theory that shapes the case study. In addition to a preparatory review of prior theory, additional theory may be introduced as the case proceeds and new theories are developed. The researcher should be sufficiently flexible to allow such developments to take place.

Collecting Evidence

The preparatory review of theory will give an initial indication of the types of evidence that should be looked for in the case study. It may be helpful to consider each research question, possibly each element of each research question in turn, and identify the evidence that is needed in each instance. Mason (2002)⁶ provides a useful layout for a chart linking research questions to sources of evidence, and other research issues, including ethical issues — see Figure 1 below. Such a chart should be completed when the research is being designed. But as the case study progresses, the researcher should be constantly alert for any evidence that appears to be important in explaining the case, and should be prepared to allow issues and theories to emerge out of the case, rather than being imposed on it. In most cases it will be necessary to use multiple sources of evidence. These could include the following:

Artefacts: these are any tangible items, such as formal reports and statements, minutes of meetings, informal records, and personal notes and memos made during meetings.

Questionnaires: these can be useful, even in case studies, to obtain evidence from a large number of people. They can also be used to gather information in a consistent and comparable manner. They could be mailed, or more likely completed during meetings with the researcher. Such meetings provide the opportunity for issues raised by the questionnaire to be discussed and any ambiguities to be resolved.

Interviews: this is the type of evidence most usually associated with case research. Interviews can take different forms, but probably the most important issue to consider is the extent to which they should be structured, semi-structured or unstructured. Structured interviews ensure that similar questions are asked of different people and that comparable information is obtained. But this requires the researcher to have a clear idea

Figure 1: Layout of chart for linking research questions, methods, practicalities and ethics.

Research Questions	Data Sources and Methods (i.e. evidence)	Justification (how evidence will be used?)	Practicalities (e.g. resources, access, skills)	Ethical Issues (such as confidentiality)

Source: Mason (2002: 30) — Adapted.

⁶ Jennifer Mason’s book on *Qualitative Researching* is very useful for anyone planning to do qualitative research, including case study research. Although it does not focus on accounting research, I have recommended it to all my research students since the first edition appeared in 1996.

of the type of information to be generated. Unstructured interviews, which is the way I tend to do my research, allow the researcher the flexibility to pursue new issues and ideas as they arise and thereby to explore emerging lines of enquiry. With semi-structured interviews the researcher has a broad framework for the questioning, which means that similar issues are discussed with a number of different people, but there remains sufficient flexibility to explore the issues in depth, and to follow up the responses that are given by the interviewee.

Observing actions and meetings: attending meetings can be an important source of evidence for accounting researchers. Clearly, it is better to attend meetings than to rely on the recollections of others who were present. Personally, I have found it difficult to obtain permission to attend important meetings. However, it can be easier to gain such permission when the researcher is actively involved as, say, a facilitator or actor — see above.

Assessing (measuring) the outcomes of actions: where actions have been taken at the case site, either by the researcher, or the subjects being studied, evidence of the outcomes is likely to be very important. Evidence collected by the researcher is clearly desirable, but it may be necessary to rely on the organisation's own information systems.

All evidence collected by the researcher should be recorded in an ordered and coherent manner for subsequent analysis and reflection, and where possible interviews and meetings should be tape recorded, or notes taken at the time. Where neither tape recording nor note taking is feasible, a record of what was said should be made in writing (or on tape recorder or word processor) as soon as possible thereafter. Memories can fade very quickly. Even where notes are made at the time, these should be converted into a more formal record as soon as possible. It is some times suggested that this should always be done before the end of the day — sleep dulls the memory! Thus, in arranging interviews, etc., it is important that, if several are to be held on the same day, time is allowed for writing up notes.

While formally collecting evidence, it is also important to be aware of informal evidence. For example, when interviewing a manager about the use of an accounting system, clues may be obtained about, say, the relationship between production and accounting staff through casual comments, tone of answers, physical gestures, etc. The researcher should be prepared to follow up such informal clues in any appropriate way; for example, by asking additional questions, interviewing other managers, observing meetings, and so on. Apart from suggesting new issues to explore, informal evidence may also give indications about the credibility of different information sources. All such informal evidence should be noted. For example, where an interview is tape recorded, if interesting non-verbal signals are obtained, the researcher could append suitable notes at the end of the tape.

When travelling to a case site to conduct an interview, I always allow plenty of time so that there is an opportunity before the interview to record at the start of the tape such issues as: the purposes of the interview, how it relates to previous interviews, what is expected, and how the interview is to be conducted. When there are two or more researchers attending the interview we usually stop (frequently at motorway services) to discuss these issues over coffee. We record these pre-interview discussions at the start

of the tape, and comparable post-interview discussions are recorded in a similar way after the interview. These post-interview discussions review the informal information not on the tape — such as non-verbal signals, whether we felt the interviewee was open or guarded in his/her responses, and so on. We also discuss interesting issues which had been raised, especially where they might need following up elsewhere, how the interview related to other evidence, and finally how the evidence which is emerging relates to our theoretical ideas.

When there is only one researcher such pre- and post-interview thoughts could be dictated onto the tape, or if a tape recorder is not used the information could be noted on paper, preferably in a bound book. All the records, notes and other evidence collected by the researcher should be retained, as these comprise the ‘field notes’ from which the case analysis will be produced. Care should be taken to ensure that the field notes are as comprehensive and coherent as possible. They represent the case researcher’s database.

Assessing Evidence

In conducting quantitative empirical research researchers are concerned with the reliability and validity of their evidence (see Ryan *et al.* 2002, Chapter 6). Reliability is the extent to which evidence is independent of the person using it, and validity is the extent to which the data are in some sense a ‘true’ reflection of the real world. But in case research, such notions of reliability and validity are unlikely to be appropriate. Reliability implies an independent, impersonal investigator, and validity implies an objective reality — both of which are meaningless in much case study research. As will be discussed below, the interpretations of the researcher and his/her relation to the subject matter are essential elements of any case study. Thus, alternatives to the criteria of reliability and validity are needed for case study research.

Whereas in quantitative research reliability requires an independent and neutral observer, in case study research it is important to know that the researcher has adopted appropriate and reliable research methods and procedures. This is known as *procedural reliability*. The research should have a good design that addresses clearly specified research questions; there should be a comprehensive research plan; all evidence should be recorded in coherent and comprehensive field notes; and the case analysis should be fully documented. In this way the researcher can demonstrate that the case study findings are reliable, and another person could in principle, at least, examine what has been done. In accounting terms, this might be described as an audit trail.

In discussing questions of validity it is usual to distinguish internal and external validity (see Ryan *et al.* 2002, Chapter 6). Whereas internal validity relates to the use of appropriate controls within the study, external validity concerns the extent to which its findings can be generalised to other settings. However, statistical generalisations are clearly problematic in case study research, especially in case studies where the objective is to develop theoretically informed explanations of the observed phenomena. The researcher will come to the case with knowledge of existing theories, and will examine whether the observations accord to this existing theory, and if not, the theory will have

to be modified. But if the theory does explain the observations, other researchers may want to replicate the study, both in similar conditions and in different contexts. Consequently, theories are developed and modified through case study research, and they are retained so long as they continue to explain contemporary observations.

Thus, it is more appropriate to apply the logic of replication and extension, rather than a sampling logic, to case study research. This means viewing case studies as a method by which theories are used to explain observations. The theories that provide convincing explanations are retained and used in other case studies, whereas theories that do not explain will be modified or rejected. The objective of individual case studies is to explain the particular circumstances of the case, whereas the objective of a research programme based on these case studies is to generate theories capable of explaining all the observations made. As case studies seek to apply theories in new contexts, the theory is likely to be refined and/or modified, and through this process the theory is generalised. Such a process could be described as theoretical generalisation.⁷ However, the potential confusion over different forms of generalisation has led some case study researchers to avoid the term altogether. According to Lincoln & Guba (1985) “the only generalisation is: there is no generalisation” (title of Chapter 5: 110–128). Instead, they talk about the *transferability* of the findings from one context to another and ‘fittingness’ as to the degree of comparability of different contexts (1985: 124 — see also Flick 1998: 234).

Turning now to internal validity, in case study research this criterion is replaced by the notion of *contextual validity*, which indicates the credibility of the case study evidence and the resulting conclusions drawn. This can entail several different elements.

First, the validity of each piece of evidence should be assessed by comparing it with other kinds of evidence on the same issue. Other subjects might be interviewed, records checked or observations made. This process of collecting multiple sources of evidence on a particular issue is known as triangulation — specifically data triangulation.

Second, the validity of particular sources of evidence should be assessed by collecting other evidence about those sources. If characteristic distortions emerge about a particular source the researcher will be able to assess the validity of evidence from that source. In addition, evidence might be collected using different research methods — for example, using a mixture of questionnaires to collect information from a large number of people, together with a combination of structured and unstructured interviews, and observation of meetings. This could be described as method triangulation.

Third, researchers should also assess the validity of their own interpretations of the evidence. Feeding evidence and interpretations to the subjects of the study can be helpful in confirming the researcher’s own interpretation. But, as I have found, this may not always be possible, especially where an assurance of confidentiality has been given to individual informants. Personally, I like to work in research teams in order to avoid the bias that I, as an individual researcher, might bring to the study. By using a number of researchers, sometimes with different academic backgrounds, areas of interest, research experience, and so on, it should be possible to arrive at an agreed interpretation

⁷ See Lukka & Kasanen (1995) for a discussion of different forms of generalization.

of the case, rather than one biased by the personal characteristics of the individual researchers. This could be described as researcher triangulation.

Finally, alternative theories, or even alternative methodologies, could be used to study a specific case. This might open up a diverse range of insights to be considered in interpreting the case. However, whereas an individual researcher might draw on alternative theories — using theory triangulation — it might be more difficult for an individual researcher to adopt alternative methodological positions. However, if different researchers approach the same issues using alternative methodologies, it might be possible for them to at least discuss their respective findings. Some might argue that such an approach would be unfruitful because of the incommensurability of different methodologies. But if a pluralistic attitude is taken and the alternative findings approached in an open-minded way, it may be possible to derive richer understandings through such methodological triangulation. However, I have to admit that I have not found a good example of this really working!

To summarise, whereas traditionally, empirical and especially quantitative researchers talk about reliability, validity and generalisability, in case study research we should think in terms of procedural reliability, contextual validity and transferability.

Identifying and Explaining Patterns

As the case study progresses a great deal of data will be amassed: notes and/or transcripts of interviews, documents and other reports, records of meeting, and also informal information. The researcher needs to go through all this data, possibly repeatedly, in order to identify themes and patterns. This can be very time consuming and there are no short cuts. Personally, I like to work through the transcripts of interviews (the main source of my data), highlighting relevant sections and noting interesting issues. I transfer these issues to separate sheets, cross-referenced to the transcripts, and then seek to build up a picture of the case. It is sometimes helpful to prepare diagrams or charts that attempt to link the various themes and issues so that patterns can emerge. But before illustrating such a chart, some other points need to be made.

There are now various types of computer software for handling qualitative data and for developing and arranging theoretical constructs; for example, Ethnograph and QSR NUD*IST. Personally, I have not found any of them helpful for my research. But I understand that others do find them very helpful. They seem most appropriate when similar questions and issues are covered in a number of different interviews — for example, when structured interviews are used. But in my case research I normally use unstructured interviews and work with the word-processed transcripts.

I usually have all interviews transcribed professionally. I can do this because I normally have the necessary research funding. However, transcribing interviews is a very time consuming (and accordingly expensive) activity. I recognise that most Ph.D. students do not have the resources to have their interviews transcribed professionally and so have to do their own transcriptions. This can take a considerable amount of time. I sometimes tell Ph.D. students to be selective in what they transcribe. Initially, I suggest listening to the tapes and noting interesting sections and relevant issues on index cards.

Using a tape recorder with a number counter, or better still a modern digital recorder, it is possible to cross-reference these cards to the positions on the original recording — so that they can be easily located again. As a picture of the case begins to emerge, the more important tapes and relevant sections of other tapes can be transcribed as necessary.

Now returning to charts and diagrams, they can be helpful to give a picture of relationships between the issues which are emerging in the case. In this way missing connections, inconsistencies, etc., can be located and avenues identified for further investigation. As more evidence is collected, it may be possible to expand the diagrams and charts, adding new connections, and even reinterpreting the evidence collected earlier. The emerging patterns identified by the researchers will serve both to describe and explain the case.

In analysing the case of Omega, see Scapens & Roberts (1993), we were faced with a vast amount of data in the form of transcripts of interviews with various people who had been involved in the implementation of a new production control system, known as the Production Cost Control Project (PCCP), at one of the sites which was piloting the new system. However, the implementation had been unsuccessful and we wanted to explain why PCCP was resisted at this pilot site. A wide range of issues were identified in the interviews, ranging from the company's history as a monopoly supplier up until the 1970s, when it became subject to increasing competition. Within this context a

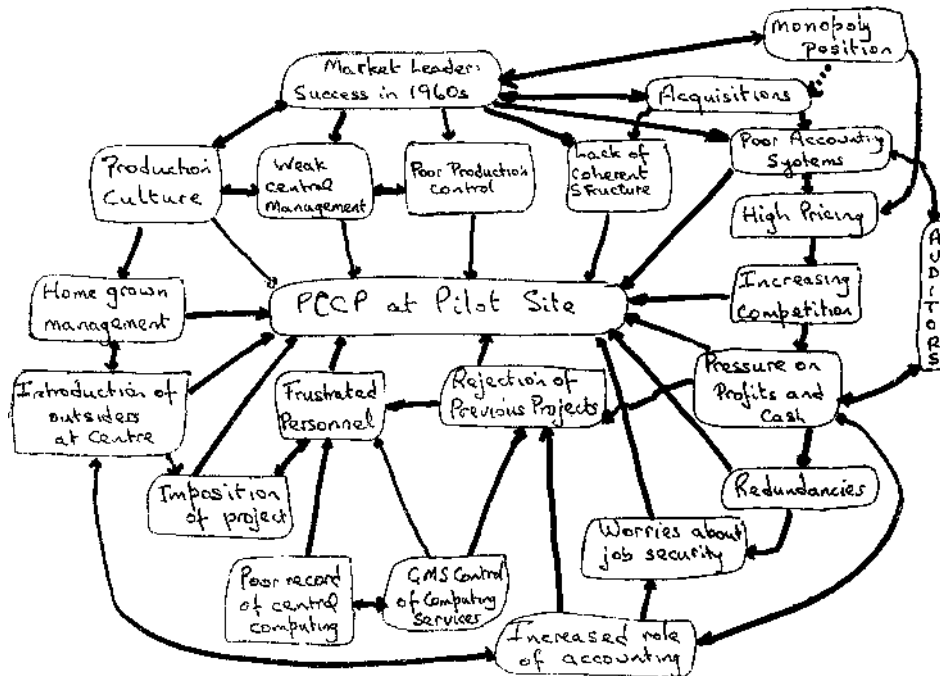


Figure 2: Example of pattern diagram of Omega case study.

production culture had emerged in the company, but this culture came into conflict with the increasing role of accounting due to pressure on cash flows and profits. Other issues were also involved, such as concerns about redundancies, poor experiences with centrally designed computer systems, the appointment of people from outside the company to senior management positions, and so on. To try to make sense of all these issues and the interconnections, we produced the chart shown in Figure 2 (see previous page).

When we write a case study we have to write in a linear fashion, with one sentence/paragraph following another, and with one idea following another. We tend to think in such a linear fashion as well. However, in a case study the events and issues are much more complex, with many interconnections and reciprocal relationships — it is generally far from linear. Nevertheless, we have to translate this complexity into a structure through which we can tell the ‘story’. The chart shown in Figure 2 enabled us to see the broader picture, to understand the interconnections between issues and events, and thereby to develop a structure for writing up the case. For instance, the lower part of the chart links the increased role of accounting with pressure on profits and cash, and the introduction of outsiders to central management. This interacted with redundancies, worries about job security, rejection of previous projects, frustrated personnel and so on, to create a situation in which the new production cost control system, introduced by the accountants, was perceived as a threat by many people at the pilot site.

We also produced another chart, see Figure 3 opposite, to help us see the connection between the various literatures that were used to interpret this and other case studies — these ranged from social theory, in particular Giddens’ structuration theory, to organisation theory, and to the information systems and management control literatures. There is nothing fundamental in the nature of these particular diagrams, they simply provided a convenient way of making sense of a wide range of issues and literatures, and thereby they made it easier for us to begin the difficult task of writing up the case.

Writing-up Case Study Research

The time and effort involved in writing up case study research should not be underestimated. It can be a very time consuming process. A useful rule-of-thumb in case study research is that it takes one third of the time to set up the study, one third to do the fieldwork and one third to write it up. However, case study research is all about writing — writing is not confined to the final writing-up stage. Planning a case study involves writing proposals, research plans, preparing interview schedules, etc.

During the fieldwork there will be considerable writing of notes and possibly reports to be fed back to the subjects of the research and so on. Finally, the writing up stage involves the production of a detailed case analysis and an interpretation of the case, which together form the basis for research papers and possibly a dissertation. Thus, case study researchers need to have good language skills, as this is the basis of the research method; in the same way that quantitative researchers need numerical skills.

The writing up stage involves the construction of the case study from what is likely to be a mountain of data, field notes, reports, etc. which have been collected during the fieldwork. This is a creative and literary act and, as such, the case researcher is the author-writer of the case study. In this writing the researcher has to produce a convincing text — that is a text that convinces the reader. But the first stage in convincing a reader is convincing oneself as a researcher. First, the researcher should feel he/she fully understands what is happening in the case. There should be no loose ends or outstanding issues — all issues considered relevant should have been explored and explained. Second the research must have a high level of procedural reliability, contextual validity, and transferability. Finally, and most importantly, the researcher must be convinced that selective plausibility has been avoided. Selective plausibility occurs when evidence is selected simply because it fits the researcher's own theory, while other evidence is ignored because it does not fit that theory. One way to avoid selective plausibility is build into the research design a recognition of, and an explicit search for, the types of evidence which would contradict the researcher's theory.

Once the researcher has convinced himself or herself, the task of writing a text to convince others can begin. Golden-Biddle & Locke (1993) suggest that convincing texts have authenticity, plausibility and criticality.

Authenticity is achieved by demonstrating that the researcher's interpretations are grounded in the case. The text should give the reader a clear sense of the author having been there. This can be achieved by providing rich details of the case and by explaining the extent of the researcher's relationship with the case. For example, details of the people interviewed, meetings attended, etc., should all be provided in sufficient detail for the reader to see how deeply the researcher has become immersed in the case. Authenticity will also be enhanced by the use of appropriate data to support the arguments being advanced. I try to use the interviewees' own words, and include many quotes in my case studies. But when quotes are used, it is important to ensure that they relate clearly to the points being made.

Plausibility will be enhanced if the text make sense to the reader and displays a high level of knowledge on the part of the author. A coherently written and well-structured case study will also increase the plausibility of the text. The issues raised by the case should be linked to the existing literature and recognise relationships with other cases and theories, including other disciplines, where relevant. However, it can be difficult to include a comprehensive literature review in a case study paper for a research journal — due to length restrictions. Nevertheless, it is important to show the reader the theoretical grounding of the case study and how it fits with broader literatures, but as concisely as possible.

The criticality of the text relates to the possibilities it provokes. The case may raise new ideas and/or add to theory. Further, it may have implications, both at the level of the case itself and more generally; for example, by drawing out theoretical insights which can be taken to other case studies. This relates directly to the issues of transferability discussed earlier.

Although these three criteria can be met in a variety of ways, a text which has authenticity, plausibility and criticality is likely to be convincing, and, as such, to be a

good case study. And if you have produced a good case study, you are likely to want to get it published

Getting It Published

Clearly, to be published, a case study must be well written and thus authenticity, plausibility and criticality are very important. Also important is a good research design, with clearly developed research questions, which are explicitly addressed through the case study. The study must be theoretically well informed, with explicit theoretical underpinnings and consistent use of theory. It must also make appropriate use of evidence, which has been carefully collected and properly triangulated. In short, the study must have given appropriate consideration to the issues raised in this chapter. However, I would make some additional points, based on my experience as an editor of *Management Accounting Research*.

For a case study to be publishable it must make a contribution to the existing knowledge of the subject. In other words, it must contain some originality. This will normally be found in the implications of the research, which may be either theoretical or practical. But for publication in an international research journal some theoretical contribution is probably necessary. However, identifying suitable contributions in individual research papers can be quite difficult, especially when the research has been done as part of a research degree. Such a study will have been written up in the form of a dissertation and the researcher may then want to divide it up into two or more separate papers for submission to research journals. Here it is important to identify the specific ‘message’ that each paper is seeking to convey — i.e. its contribution. Sometimes, it is tempting for a doctoral researcher simply to summarise the entire research in one paper. In such cases, I usually find that there is no clear message, and as such the paper fails to make a sufficient contribution to justify publication. Rather than starting from a summary of the research, it is better to start by establishing the messages that each paper is to convey, and then asking whether there is sufficient originality to justify publication. It is always important expose such papers to wider audiences at conferences and workshops before submitting them to journals. Contribution to knowledge can be a subjective matter and can be difficult for the individual researcher (especially the inexperienced researcher) to recognise.

In translating a large-scale study into a series of research papers, it is important to ensure that each paper makes its own contribution. As such, although references can be made to other papers, each individual paper must stand on its own. Thus, there must be a clear research question or questions which are addressed in the paper, and which have specific implications. However, it is not normally necessary to repeat the development of the theoretical framework in each paper — cross-referencing to other papers is usually sufficient. This brings me to the use of theory in case study based research papers. There is a tendency to produce papers which could be described as ‘thick sandwiches’, which contain some initial theory, followed by a detailed description of the case, and then some (usually brief) theoretical discussion. In such papers, there is little or no evident theory in the case description. However, if the case study is theoretically

informed, one would expect to see the case description penetrated by theory. It may not be necessary to keep referring to theoretical ideas and concepts in the case description, but the structure of the case description should have a clear theoretical underpinning. It may be as simple as using sub-sections and sub-headings derived from the theoretical framework to organise the case material.

Finally, it is important to recognise that the case studies published in different journals may have different styles. For example, in some journals there are extensive case descriptions, while only limited descriptions are provided in others; in some extensive quotes are used, whereas in others there are few, if any, quotes. Thus, it is important to be familiar with the style of papers in the intended journal, and more generally always to write with a specific journal and audience in mind. Furthermore, if that journal does not accept the paper, it should be revised before it is submitted to a new journal. When a paper has been rejected it is not normally a good idea to send it unchanged to another journal. Apart from differences in journal styles and audience, it could be sent to the same reviewer. In such an event, if the reviewer's previous comments have not been incorporated into a rewritten version, the reviewer is likely to be very negative about the paper, even if it is now submitted to a 'less prestigious' journal (whatever that may mean!). I have been asked to review an unchanged version of paper I had previously reviewed for another journal on several occasions in my career. Finally, when reviewing a paper for a specific journal it is always worrying to see a bibliography that contains no (or very few) references to that journal, when you know it has already published various papers in the area.

Concluding Reflections

As I said at the beginning of this chapter, case studies are not the easy option — even the initial stages of negotiating access to suitable case sites can be much more problematic than obtaining data tapes or sending out questionnaires. But in addition, case study research requires very sound methodological as well as theoretical understandings. The research must also have clear research questions, and the researcher must be very well organised, both when collecting evidence and in synthesising the results. But most importantly, the researcher needs excellent language skills to be able to convince the reader that his/her interpretation of the case provides real insights into the subject matter of the research.

As case studies have become a more established method of (management) accounting research, expectations concerning the level of methodological and theoretical sophistication have increased. When case studies were relatively new in accounting research, reviewers and journal editors were sometimes prepared to accept papers with largely descriptive case studies, especially if they were in an area that had not previously been researched. Similar comments could also be made about case studies in research dissertations. However, nowadays case study researchers are expected to have given appropriate consideration to the methodological and theoretical underpinnings of their research design, and to have used/developed theoretical understandings of the subject

matter of their study. As such it could be said that doing case studies is becoming harder!

In a review of the first decade of *Management Accounting Research*, which I undertook with my co-editor, Professor Michael Bromwich, we categorised a significant number of papers (40% in 1990–1994 and 29% in 1995–1999) as ‘applied’ research — that is, they had no explicit, or clearly discernible implicit, theoretical framework (see Scapens & Bromwich 2001). These papers were usually either case studies or surveys. However, we emphasised that papers which are not explicit about their theoretical underpinnings are less likely to be published in the future (Scapens & Bromwich 2001: 249).

Nevertheless, despite the difficulties, case study research can be very rewarding. At a personal level, having undertaken case studies myself and supervised others conducting case studies over a period of approaching twenty years, I now feel that I have some understanding of why management accounting practice takes the form that we observe in contemporary organisations, and I am now beginning to make sense of the processes of management accounting change. The case studies that I undertook with John Roberts in the early 1980s helped shape my understanding of the role of management accounting in organisations. This research drew on Giddens’ structuration theory and focussed on the role accounting in the signification, legitimation and domination of organisational activities (see Roberts & Scapens 1985), and led to my interest in researching resistance to management accounting change (see Scapens & Roberts 1993). This later research was extended through case studies with John Burns in the 1990s, which used institutional theory to study management accounting change. These case studies have emphasised the importance of exploring the ‘taken-for-granted’ assumptions that underpin organisational activity when seeking to implement new management accounting systems and techniques (Burns *et al.* 2003).

But this does not mean that I now understand everything about management accounting, much still remains to be done. Nevertheless, I believe that I now have much richer insights and a more theoretically informed understanding of management accounting practice in contemporary organisations, than I could have obtained had I continued using survey-based research, irrespective of the sophistication of the quantitative techniques used to analyse it. For me, case studies are essential for understanding the nature of management accounting practices in contemporary organisations. I hope my comments in this chapter will encourage other researchers to use (and to continue using) case studies in their own fields of accounting research.

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