### **Qualitative Methods for Policy Analysis: Case Study Research Strategy**

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#### Abstract

Many policy researchers are predisposed to use either quantitative or qualitative research methods regardless of the research questions at hand, leading to varying degrees of gaps in their findings and policy recommendations. Qualitative approaches effectively address why and how types of research questions to complement the answers for who, what, where, how many, and how much research questions, obtained using quantitative research methods, enabling researchers to make policy outcomes meaningful and contextually relevant. This chapter introduces the case study as an appropriate research strategy for accommodating qualitative and quantitative methods, followed by a brief account of qualitative research methods.

### **Keywords**

Policy analysis · Qualitative research · Case study approach

#### 7.1 Introduction

The main objective of policy analysis is to assess whether a given policy or set of policies has achieved its intended goals/objectives and, if not, why and how they can be fine-tuned for increased effectiveness. Policy analysis can be carried out using both quantitative and qualitative approaches. Both approaches have respective strengths and weaknesses depending on the research questions to be answered. Quantitative approaches are good at effectively addressing policy research questions

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that ask *who*, *what*, *where*, *how many*, and *how much*, while qualitative approaches are good at addressing *why* and *how* types of research questions. Therefore, a careful selection of proper tools of inquiry is required to match the research questions being answered (Downey and Ireland 1979).

Although a broad range of research questions must be addressed to gain a holistic understanding of policies being analysed, there seems to be a clear demarcation between academics/researchers whose dominant approach is either quantitative or qualitative methods. Therefore, operating within one's comfort zones would give him/her incomplete solutions to the problem being investigated. To further elaborate on this, Arabian folklore regarding Mulla Nasrudin could be cited:

### "There Is More Light Here"

Someone saw Nasrudin searching for something on the ground.

'What have you lost, Mulla?' he asked.

'My key,' said the Mulla.

So, they both went down on their knees and looked for it.



After a time, the other man asked: 'Where exactly did you drop it?' 'In my own house.' 'Then why are you looking here?' 'There is more light here than inside my own house." Idries V (2014). The Exploits of the Incomparable Mulla Nasrudin, ISF Publishing. London. pp. 9.

Similarly, many researchers gravitate towards approaches they are familiar with and comfortable using, without regard to the research questions and specific research settings at hand. Therefore, are predisposed to use a particular research strategy regardless of the research questions (Yin 2003). Scepticism towards other approaches makes collaboration extremely difficult, resulting in varying degrees of gaps in research findings and subsequent policy recommendations.

One should keep in mind that the world is not fragmented in the way we perceive it through our own lenses. Gartner and Birley (2002) argue that some research questions simply do not get asked or cannot be asked in quantitative research. Therefore, adopting one approach vis-à-vis the other would only allow us to unravel parts of the jigsaw puzzle, making it impossible to make complete sense of what is happening around us. Failure to gain a complete picture of the situation means that policies formulated/analysed and recommendations made are contextually inappropriate, resulting in varying degrees of inefficient and ineffective policy outcomes.

Therefore, qualitative and quantitative methods play complementary and interdependent roles in gaining a holistic understanding of the phenomenon being researched.

Though the other chapters of this book have been dedicated to exploring various quantitative methods that can be used in policy analysis, the objective of this chapter is to familiarise the reader with qualitative research methods. Consequently, researchers and policy analysts will be in a better position to make their research findings and policy recommendations relevant and contextually more appropriate by incorporating qualitative tools into their repertoire of research toolkits or by collaborating with qualitative researchers.

This chapter will first introduce case study research as an appropriate methodology for conducting policy analysis research, mainly because of its ability to accommodate qualitative and quantitative research methods. Then the chapter will present a brief account of qualitative methodology with justification for its suitability for complementing quantitative research strategies in policy analysis research in the context of case study research.

# 7.2 Case Study as an Appropriate Research Strategy for Policy Analysis

Researchers unfamiliar with the case study strategy sometimes harbour the misconception that it is a means of producing narratives/stories. This is mainly due to a lack of rigour and systematic procedure in many case studies (Yin 2003). The case study methodology is considered as a broad umbrella research strategy that can accommodate several methods (Hartley 1994, p. 209; Hartley 2004). This is used to understand a complex social phenomenon by focusing on it in-depth while retaining a holistic and real-world perspective, either by carrying out a single case study or using it in combination with other methods such as surveys and quantitative techniques (Yin 2018). This flexible accommodation of multiple methods makes the case study approach an ideal research strategy for policy analysis as it provides much-needed flexibility for doing behavioural research because of its capability to accommodate multiple research tools/methods (Eisenhardt 1989, p. 535; Hammersley 1989, p. 93; Stoecker 1991, p. 99; Hamel et al. 1993, p. 1; Hartley 1994, p. 209–210; Yin 1994; Hartley 2004).

Case study strategies are adopted when the researcher is focusing on a contemporary phenomenon/event in its real-life context without control over the event (Yin 2018); when the phenomenon is not isolated from its context (Yin 2003; Hartley 2004); and, when we need to understand how behaviour and/or processes are influenced by the context (Hartley 2004). The case study strategy has the ability to: (a) explore a given process(es)/event(s) (Hartley 1994, p. 211–213; Stoecker 1991; Gummesson 1991, p. 76; Eisenhardt 1989, p. 535); (b) describe the process (Bonoma 1985 p. 198–203; Hamel et al. 1993, p. 39); (c) differentiate general processes from exceptions (Stoecker 1991, p. 95); (d) see whether a decision or set of decisions complies or deviates from general patterns (Miles and Huberman 1994,

p. 29); and (e) explore why certain decisions were taken, how they were implemented, and with what outcomes (Schram 1971; Yin 1981; Yin 2018). The latter is an essential aspect of policy analysis.

Furthermore, case study strategy (a) can piece together the required contextual factors (Miles and Huberman 1994, p. 27; Geertz 1973; Miles 1979, in Bonoma 1985, p. 201; Hartley 1994, p. 208, 212; Yin 1994, p. 48; Zonabend 1992; Gummesson 1992, p. 17; Gummesson 1991, p. 76); (b) offers the tools to study the research issue in a bounded context (Miles and Huberman 1994, p. 25); (c) provides ways and means to understand the dynamics of a single setting (Eisenhardt 1989, p. 534; Stoecker 1991, p. 97–98), within a particular historical period of a social unit (Stoecker 1991, p. 97–98) longitudinally (Hartley 1994, p. 212); and (d) helps understand those social processes in their organisational/environmental context (Hartley 1994, p. 212), within the meanings of the actors (Hamel et al. 1993 p. 33; Hartley 1994, p. 212).

The case study approach can be broadly used as a frame demarcating the boundaries of data /information-gathering (Stoecker 1991, p. 9; Kodithuwakku 1997; Kodithuwakku and Rosa 2002) rather than treating only the respondents as focal points. These boundaries can be physical/geographical, i.e. based on the level and the extent of the population (Stoecker 1991, p. 109), social, and/or a defined time period (see Yin 1994, p. 24 for a similar argument). For example, suppose we are to analyse the effects of a new fertiliser subsidy policy on farmers. In that case, is essential to cover farming and associated activities by farmers in a given geographical/social unit at least over an entire cropping season to gain a complete picture (see Burgess 1982, p. 76 for a similar argument in different contexts).

In economics, the case study strategy can be used to study a structure of a selected industry, or the economy of a given city or a region, or even the international relations (Yin 2003) that also define the geographical, social, economic, and political boundaries. In policy analysis, the time dimension can be used to define the boundaries of the case study as well (Yin 2003). Furthermore, a holistic view of behaviour can only be gained through a longitudinal analysis of people's activities vis-à-vis cross-sectional studies. A longitudinal analysis would also provide an opportunity to show how cause and effect occur (Stoecker 1991) over a chronological sequence of activities (Brunåker 1993) and help explore the historical contexts of processes, leading to a clear understanding of overall pictures of the behaviours, including critical events and their consequences (Kjellen and Soderman 1980; Gummesson 1991). With respect to policy analysis, the case study can be considered as an ideal strategy for fulfilling this requirement as the researcher may investigate how and why a certain programme has worked or not worked (Yin 2003). As was discussed before, given the case study strategy's ability to combine multiple methods, the researcher's understanding of the phenomenon could further be enhanced through conducting a survey or examining economic data under the umbrella of the case study. This will enhance capabilities of unravelling what the outcomes of a given policy or programme are, how many people have been affected, and with what kind of benefits/costs (Yin 2003). According to the same author, the case study approach relies on multiple sources of evidence, with data collected based on previously developed theoretical propositions converging in a triangulating fashion.

Since researchers have the freedom to define the approriate boundaries of the case study, they can capture a 360-degree view of the phenomenon being researched, which also has important implications for sampling decisions. The coverage can be from a single case study to carefully matched pairs to multiple cases (Hartley 2004). Furthermore, a single case has the ability to accommodate several sub-cases or sub-units of analysis (McClintock 1985; Yin 2018) selected through probability or non-probability sampling techniques (McClintock 1985; Yin 1994, p. 41), leading to a multiple embedded case-study design (Yin 1994).

### 7.3 Qualitative Methods and Their Appropriateness for Policy Analysis

Understanding behaviours is an essential aspect of policy analysis research, as policies are formulated and implemented to achieve sustainable socioeconomic development by changing/improving socioeconomic behaviours of target populations, so that wealth creation can be enhanced by minimising the misallocation of scarce resources. Therefore, policymakers/analysts must have a sound understanding of human behaviours and their causes. Fletcher (2017) argues that qualitative methods, in particular Critical realism, has helped researchers to search for causation through explaining social events and suggesting practical policy recommendations to address social problems. Fletcher provided a lucid example of Critical realism as an applied qualitative methodological framework to study Canadian farm women's experience with agricultural policy.

Quantitative research usually uses questionnaires for gathering primary data. They are designed with the assumption of individuals as the unit of analysis. However, the decision on the appropriate unit of analysis can only be made when the researcher accurately specifies the research questions (Yin 2003). For example, in rural farming contexts, behaviours can be understood by treating the household/ family as the unit of analysis, enabling researchers to capture information on family dynamics (Kodithuwakku 1997; Kodithuwakku and Rosa 2002). Furthermore, treating the household/family as the unit of analysis has helped to gain insights into the production behaviours of farmers (Herrmann and Uttitz 1990, p. 8; Eboli and Turri 1988; Redclift and Whatmore 1990, p. 189; De Vries 1993). It has been widely argued that the behaviour of an individual or a social entity can meaningfully be understood within their environmental contexts (Bonoma 1985; Rosa and Bowes 1990; Miles and Huberman 1994, p. 27; Hartley 1994, p. 209). Therefore, we need to have a holistic perspective of the environmental context within which the behaviour takes place (Hartley 1994, p. 208–209; Hammersley 1989, p. 93; Gummesson 1992, p. 17; Rosa and Bowes 1990). Questionnaire surveys may have a limited capability in aiding researchers to gain an understanding of contextual factors (Miles and Huberman 1994, p. 35; Yin 2018). Furthermore, questionnaires are not capable of

going beyond snapshots of events, such as by cutting across temporal and contextual gestalts of situations (Bonoma 1985, p. 204).

The qualitative research method is an umbrella term for a variety of techniques that aim to explain, decode, and translate the meaning-not frequency-of a naturally occurring phenomenon within the social world (Van Maanen 1979, p. 520. These techniques are described as "holistic" (McClintock et al. 1979, p. 612; Jick 1979, p. 609). They assist in unravelling complex patterns and social interconnections (Gummesson 1992, p. 15). Qualitative research accepts that several ways can be adopted to make sense of the world (Jones 1995, p. 2). They allow researchers to capture peoples' view of the world and also the meanings perceived by them (Jones 1995, p. 2; Pope and Mays 1995, p. 42; Miles and Huberman 1994, p. 10). Qualitative methods allow the research to go beyond "snapshots" of "how many" to just "how" and "why" things happen (Pope and Mays (1995, p. 42), which statistical analyses are unable to fulfil (Miles and Huberman (1994, p.10) and Stoecker (1991, p. 94)).

In qualitative methods, explanation replaces measurement, and understanding replaces generalisability (Jones 1995, p. 2). This allows detailed examination of social processes and identification of factors peculiar to each case and a greater understanding of causality (McClintock et al. 1979, p. 612). Moreover, Hamel et al. (1993) highlighted the value of knowledge about the actor's perspective of a given situation.

Qualitative data is generally regarded as superior to quantitative data concerning the density of information, vividness, and clarity of meaning – a characteristic very important in holistic work (Weiss 1968, p. 344; Jick 1979, p. 609). Data elicited by qualitative research is contextually embedded (Van Maanen 1979, p. 521; Miles and Huberman 1994, p. 10) in that they help to understand an observed behaviour within its environmental context (Van Maanen 1979, p. 521; Miles and Huberman 1994, p. 10). Therefore, unlike quantitative methods, qualitative methods are sensitive to the sociocultural context of collected data (Cassell and Symon 2004), and therefore, operating in a qualitative mode reduces the distance between context and actions (Van Maanen 1979, p. 520) and help to understand social phenomena in their natural settings (Pope and Mays 1995, p. 42) which is an essential requirement for improving the design and targeting of policies. Thus qualitative research methods may be the major or only valid knowledge accrual devices for studying human behaviours (Bonoma 1985, p. 203) in their real-life settings.

### 7.4 The Need for a Theoretical Framework

There is a misconception among some researchers that qualitative research adopts only the grounded theory approach. According to Yin (1994), grounded theory tempts the researcher to collect almost every piece of data without a clear direction. Such an approach would yield fascinating details about life in a particular context without wider significance (Hartley 1994). Similarly, research without theory would lead to an accumulation of anecdotes without regard to contextual differences

(Cochrane 1987, in Stoecker 1991). This necessitates the researcher to identify the central research question that governs the policy analysis process beforehand.

Policies are formulated with important socioeconomic theories in mind with the expectation of certain behavioural changes in the target populations once the policies are implemented. Therefore, for analysing a given policy or set of policies, it is important that researchers formulate a theoretical/conceptual framework beforehand by taking into account the behavioural changes that were expected during the policy formulation stages, based on which theoretical propositions can be developed to collect relevant data. Consequently, adopting a deductive approach would enable the researcher (a) to define the appropriate research design and methods of data collection and analysis as well as (b) to generate relevant results (Yin 1994). However, although adopting a positivist approach requires the researcher to formulate a theoretical framework prior to data collection and analysis, operating in a qualitative mode gives the researcher the freedom to modify the initially formulated theoretical/conceptual framework with the progress of data collection and analysis (Hartley 1994).

Adopting a theoretical framework in qualitative research would enable making choices with the progress of data collection to decide on/explore the appropriate line of further inquiries and discard inappropriate lines of inquiry, as well as identify relevant data and eliminate irrelevant variables during data analysis (Smith et al. 1992, p. 74; Bryman and Burgess 1994, p. 5; Jick 1979; Miles and Huberman 1994, p. 16–23; Ritchie and Spencer 1994, p. 176; Yin 1994, p. 104). This also enables the researcher to carry out sampling by looking at only some actors in some contexts dealing with some issues and relationships (Miles and Huberman 1994, p. 22). Thus, a theoretical framework provides clarity and focus, especially for inexperienced qualitative researchers concerned about diffuseness and data overload (Miles and Huberman 1994, p. 17), avoiding the vulnerability of researchers becoming overwhelmed by data and drawn into narratives (Hartley 1994).

Using a topic guide (i.e. loose template to assist in data gathering and analysis) developed based on the theoretical framework as the data collection tool assists researchers to carry out continuous data gathering and data analysis throughout the fieldwork. A topic guide also has the flexibility to accommodate new topics during the research, helping to capture a complete picture of the relevant behaviour.

Developing a theoretical framework prior to the collection of data also fulfils the requirement of adopting a theoretical sampling strategy when operating on a qualitative mode in order to gain a complete understanding of the phenomenon being studied.

# 7.5 Qualitative/Case Study Research and the Need for Theoretical Sampling

Most conventional field research is loosely structured. There is also a common misunderstanding that field research does not employ any form of sampling decisions as they are only applicable to survey research (Burgess 1982, p. 75).

However, Miles and Huberman (1994, p. 17) argue that "loosely designed studies make good sense only when experienced researchers have plenty of time" (Miles and Huberman 1994, p. 17) and, therefore, it is not possible to study every one everywhere and do everything (Miles and Huberman 1994, p. 27). Consequently, Jick (1979, p. 604) encourages researchers using the qualitative methodology to utilize sampling techniques as they help systematic data collection as well as analysis (Miles and Huberman 1994, p. 27).

Developing a theoretical framework prior to data collection (as discussed above) enables the researcher to adopt a theoretical sampling strategy when operating in a qualitative mode, which is essential to carefully decide what groups to study, where and when to study them, what data to collect, and when to stop studying them (Burgess 1982, p. 75). Theoretically driven selection of cases ensures complete coverage of a phenomena being studied and comparability across a diverse range of groups, letting the researchers identify and categorise emergent theoretical properties (Johnson 1990, p. 27); Miles and Huberman 1994, p. 17–18; Johnson 1990, p. 42). In other words, while data collection and analysis are in progress, theoretical sampling enables the researcher to make further sampling decisions (Glaser and Strauss 1967, in Burgess 1982, p. 75; Gummesson 1991, p. 84), refining the theory if deemed necessary (Pope and Mays 1995, p. 110).

Sampling in field research usually commences with the selection of a specific research site (Burgess 1982, p. 77; Strauss et al. 1964), so that a researcher can choose to explore the life-ways of one social aggregate rather than another. Furthermore, selection of a research site is considered as a function of qualitative data (Jick 1979, p. 604) as it influences the data that will be gathered (Burgess 1982, p. 76). As a result, the researcher's decision where to locate herself/himself and her/his studies is an important sampling decision. This aspect ideally matches with the advantage of the case study strategy that the researcher can decide on the physical/geographical and sociocultural boundaries of the case study.

Furthermore, sampling decisions of qualitative studies are chosen for theoretical, not statistical, reasons (Eisenhardt 1989, p. 537); hence they are "purposive" (Kuzel 1992; Moore 1989) and theory-driven (Miles and Huberman 1994, p. 27). In theoretical sampling, the goal is to select respondents who are likely to replicate or extend the emergent theory (Eisenhardt 1989). Sampling in qualitative research, therefore, is not pre-specified and can evolve through fieldwork (Miles and Huberman 1994, p. 27). Consequently, no sampling frames are available for the researcher adopting qualitative methods requiring her/him to rely on key informants for gaining insights on regular/usual patterns of behaviours (Freeman and Romney 1987; Freeman and Romney 1987; Johnson 1990, p. 35) as well as deviations

<sup>&</sup>lt;sup>1</sup>For a lucid example for selecting a geographical boundary of a case study, see Kodithuwakku (1997) and Kodithuwakku and Rosa (2002) in which the authors selected a Sri Lankan village to explore entrepreneurial behaviour of rural farmers. Similarly, Leach (1967) drew conclusions on his fieldwork in just one village to counter some interpretations from an extensive survey conducted by Sakar and Tambiah (1957) in 57 villages on land ownership in Sri Lanka.

(Kodithuwakku and Rosa 2002), which is an essential requirement for policy analysis.

According to Cambell (1955), informants should be selected based on their informedness and ability to communicate with the social scientist rather than their representativeness. Key informants can act as (a) gatekeepers to research sites (Burgess 1982, p. 77), introducing researchers to other inhabitants, and (b) a source of cross-validation/triangulation for a variety of economic (Johnson 1990, p. 73) and contextual data (Kodithuwakku and Rosa 2002). Once the respondents are introduced by the key informants, the researcher can adopt snowball (or referral) sampling through which, at the end of each interview, respondents can be requested to introduce others whom they think are in the same category (Ostrander 1980, p. 75) or in different categories. Moreover, snowball sampling procedure provides the researcher with an explicit means of moving through a given community/social entity in a methodologically and theoretically meaningful manner (Werner 1989), as it enables the researcher to gain complete coverage of actors holding different theories that shape their behaviours concerning the policies being analysed. Repeated interviews in the snowball sampling procedure lead to the emergence of patterns (Johnson 1990). The researcher can decide to end the sampling process when there is little or no marginal addition of knowledge gained by interviewing one more respondent on the phenomenon being researched (Hartley 1994, p. 36; Yin 1994; Glaser and Strauss 1967).

### 7.6 Data Gathering

As discussed above, the case study strategy facilitates researchers to use multiple data sources. These can be primary data sources – in-depth interviews, brief informal interviews, focus discussions, ethnography, participatory rural appraisals, direct observations, participant observation, and field notes – and secondary data sources to establish the context. Collecting information through multiple sources enables the researcher to corroborate information through triangulation (Yin 2018; Eisenhardt 1989). Figure 7.1 demonstrates evidence from different data sources converge to validate findings (Fig. 7.1).

In case study/qualitative research, interviews are used to explore behaviours in a given context (Hartley 1994, p. 210). Interviewing is the most common method adopted in qualitative data gathering (King 2004). In-depth interviewing is central to all qualitative methods, as it allows the researcher to gain an understanding of the actors' perspectives of a given situation that were not structured in advance (Smith et al. 1992). Therefore, qualitative research interviews attempt to explore the research topic from the interviewee's perspective, to understand how and why they have gained the particular perspective (King 2004). They facilitate a more interactive interviewing process, enabling the researcher to trace how different issues and situations hold different significance for different respondents/sub-cases (Stoecker 1991). Interviews can be conducted using a topic guide prepared based on a prior formulated conceptual framework.

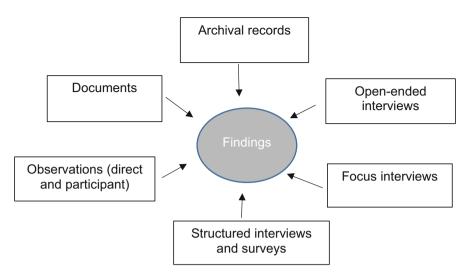


Fig. 7.1 Convergence of evidence: single case study. Source: Yin (2018)

Informants should be given freedom to choose the order of discussion, although the researcher should make a systematic attempt to fully cover the topics/areas of investigation (Tremblay 1957). The researcher may carry out repeated interviews with a given respondent if she/he deems it appropriate (Kodithuwakku and Rosa 2002). It is recommended that interviews begin with a general discussion on areas/topics that the respondents are more familiar with so that they can answer easily without embarrassment or distress, enabling the researcher to establish a better rapport.

In qualitative research, interviewees are considered participants in the research, as they actively shape the course of the interview unlike in questionnaire surveys where respondents passively respond to pre-set questions asked by the interviewer. Furthermore, allowing other interested respondents (such as family members) who wish to participate in interviews to do so enables data triangulation and further validation of findings. Researchers are advised to use audio-recording as this helps to conduct interviews in a natural discussion with minimal interruption (i.e. due to not having to take notes during the interview) (Kodithuwakku 1997). Box 7.1 illustrates the writer's experience that clearly shows the value of multiple respondents as a means of validating the findings through triangulation.

### Box 7.1 Validating the Findings Through Triangulation

While this author was conducting field research on entrepreneurship among rural dry zone framers, a pattern emerged that participatory decision-making within households was one of the causes of entrepreneurial success. As I interviewed a farmer, whom key informants had identified as the household

(continued)

#### Box 7.1 (continued)

head of an unsuccessful farming family, the farmer stated that he always discussed with his wife before making important decisions. This left me a bit puzzled as to why the family was unsuccessful. While the interview was in progress, the farmer's wife joined the discussion. The farmer, showing his displeasure, said, "Why did you come here? You have no business here. Please go to the kitchen. It is the place you should be now". With subsequent probing, it was revealed that the farmer did not engage in participatory decision-making at all with his wife. Rather, he merely informed his wife before taking any important decision, unilaterally, to share the blame if something went wrong.

Had the researcher used a closed-ended questionnaire to collect data on participatory decision-making in a family setting, the findings would have been wrong.

Most agricultural activities are carried out in an open environment where relevant environmental conditions and resultant behaviours may be observed. Direct/participant observations on a wide array of activities (Pope and Mays 1995, p. 111) provide an opportunity to triangulate between what the respondents said during interviews and what they do (Yin 1994, p. 92). The findings from other data sources on contextual factors can be triangulated using observations (Jick 1979, p. 60) for capturing the decision makers' perceptions about their decision settings (Downey and Ireland 1979, p. 634). According to Rosa and Bowes (1990, p. 8), participant observations also can help the researcher to gain an understanding of complex social interactions. Certain observations can be captured as photographs/video recordings. Table 7.1 demonstrates different data sources and their contributions to the understanding of a given phenomenon (Kodithuwakku 1997).

### 7.7 Data Analysis

Yin (1994) argues that the main objective of data analysis is to produce compelling analytic conclusions by treating the evidence fairly and ruling out alternative interpretations. Data gathering and analysis in qualitative studies occur simultaneously (Bogdan and Biklen 1982; Eisenhardt 1989; Miles et al. 2014). Such a strategy enables the researcher to cycle back and forth between the existing data and generate strategies for collecting new data. Furthermore, early analysis allows production of the interim reports required in most policy studies.

In case studies, data analysis may be carried out in three simultaneous stages: within (sub-) case analysis, cross-case analysis, and comparison of findings with the theory. The within-case analysis enables the field researcher to describe, understand, and explain what has happened in a single case in a bounded context (Miles et al. 2014). After carefully describing data, a within-case analysis should be conducted in keeping with the conceptual framework that was developed before fieldwork, eventually leading to the identification of key processes (Miles and Huberman

The sources and methods of data collection within the case study strategy	Main contribution of each source to the final understanding	Other contributions of each data source to the final understanding	
Key informants	Contextual	Theoretical	T_
In-depth interviews (sub-cases)	Theoretical	Contextual	
Direct/participant observation	Contextual	Theoretical	Triangulation
Field notes	Contextual	Theoretical	ngu
Brief interviews (with the second parallel sample)	Confirmation of specific contextual factors and theoretically meaningful areas established from above sources	Theoretical	Trial
Secondary data	Contextual	Theoretical	] →

**Table 7.1** Different data sources and their contribution to the understanding of a given phenomenon

Source: Kodithuwakku (1997)

1994, p. 33). First, data could be organised around certain topics created based on the central questions being addressed or key themes using tables to search for patterns (Hartley 2004). The topic guide developed based on the theoretical framework and used for data collection can also be used for this purpose (Kodithuwakku 1997). Then, data should be examined to see how far they fit or fail to fit into the expected categories (Hartley 2004), leading to recognition of patterns within each case/subcase (Miles et al. 2014).

Next, a cross-case analysis could be carried out to identify similar and contrasting patterns across subcases (Eisenhardt 1989; Gummesson 1991; Yin 1981; Miles et al. 2014). The objective here is to understand if processes and outcomes across many cases are qualified by local conditions to develop more powerful explanations, enhancing the generalisability of the findings (i.e. the findings are applicable beyond a given specific case) or transferability to other contexts (Miles et al. 2014).

For this purpose, the case survey method could be used as a variable-oriented strategy (Miles et al. 2014) to instil scientific rigour into the study, provided that the number of cases is large enough to warrant cross-case tabulations (Yin 1981, p. 62). Finally, the data could be compared vis-à-vis the theoretical propositions that led to the case study investigation (Eisenhardt 1989, p. 544; Hartley 1994, p. 220; Yin 1994, p. 103) to arrive at conclusions.

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