

Criticisms, Constraints and Constructions of Case Study Research Strategy

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ABSTRACT— *Case Study research strategy reveal specific insights from specific circumstances and it involves gaining understanding of phenomenon through the study of detailed activity within a particular real life context. Case study research is not a research method, it is a weapon for different research methods. It is the focus of the research that is special to the case study, a focus on the particular. The key is to draw rich, interconnected information from this particular focus of the research and derive unique insights from the analysis that follows. Case study research can be critical, positivist or interpretive in nature depending on the philosophic assumptions on what constitutes valid research. In case study research the search for particularity competes with the search for generalisability and as a result has attracted criticism on the ground of methodological weakness and rigour inadequacies. Criticism of the case study research as a research strategy is directed at many levels, from the most practical to the most abstract. Case study research is often charged with causal determinism, non-replicability, subjective conclusions, absence of generalizable conclusions, biased case selection and lack of empirical clout. These criticisms usually emanate from social scientists who value such ideals. This article will explore some of the criticisms, explain some of the constraints and provides techniques for constructing case study research.*

Keywords— Case study research strategy

1. INTRODUCTION

Abercrombie *et al.*, (1984) explain case study as “the detailed examination of a single example of a class of phenomena, a case study cannot provide reliable information about the broader class, but it may be useful in the preliminary stages of an investigation since it provides hypotheses, which may be tested systematically with a larger number of cases (p.34).” This explanation provides general indicative of the conventional wisdom of case study research, however, it oversimplified case study research strategy. Not only can case study research be used to study a ‘detailed examination of a single example, but can also be used to provide reliable information about the broader class. Yin (2014) provided further explanation of case study research as a “systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest (p.18).” In other word, a case study investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. This provides the researcher to retain all the holistic characteristics of real-life events while investigating empirical events. Case study research can therefore be an ideal methodology when holistic, in-depth investigation is needed. In other word, case study method enables a researcher to closely examine the data within a specific context.

The distinct advantage of the case study research approach is that it offers a holistic picture of a phenomenon and it thus explains the relationship between parts of a whole rather than giving pieces of information about the components of a relationship (Stake, 2005). Case study has a unique way of observing any natural phenomenon which exists in a set of data. By unique, it is meant that only a very small geographical area or numbers of subjects of interest are examined in detail. Yin (2014) further argues that case study is capable of explaining ‘how’ and ‘why’ of relationships.

Consequently, case study research has the potential to offer detail explanations and discern patterns in research study (Dul & Hak, 2008; Hamel *et al.*, 1993; Feagin *et al.*, 1991; Bromley, 1986). Yin (2014) therefore strongly asserted that case study should be the preferred strategy when there is a focus on a contemporary phenomenon within real-life context. Therefore, is case study research a valid research strategy or is it constrained by methodological handicaps? This paper explores the criticism, constraint and process for conducting case study research.

2. THE CRITICISM OF CASE STUDY STRATEGY

Case study research has become extremely popular as a research strategy (Yin, 2014). But, like all other social science research methods it has both supporters and critics. The aims, capabilities and conclusions of case study research are sources of controversy. Case study research is often charged with causal determinism, non-replicability, subjective conclusions, absence of generalizable conclusions, biased case selection and lack of empirical clout (for example, too many variables and too few cases) (Creswell, 2014). However, these criticisms usually emanate from social scientists who value such ideals. I will affirm that the majority of the criticisms of case study research could be (to some degree) explained by the markedly dissimilar methodological approaches adopted by those social science researchers who prefer quantitative methodology. Most frequent criticisms of case study strategy in the literature are that its' dependence on a 'single' case and lacking scientific rigour renders it incapable of providing a generalizing conclusion, the study of small number of cases in case study research can offer no grounds for establishing reliability of findings. Some also feel that the intense exposure of the researcher's to the study of the 'case' biases the findings. Some dismiss case study research as useful only as an exploratory tool. Some scholars (Campbell, 1975; Eysenck, 1976) claimed that case study is most useful for generating hypothesis, while other research methods are more suitable for hypotheses testing and theory building. Finally, that case study research contain a bias toward verification, in other words, it has tendency to confirm the researcher's preconceived ideas.

However, Dul and Hak (2008) were careful to reject the criticisms of case study as poorly founded, made in the midst of methodological conflict. Creswell (2014) strongly hold that scholars continue to use case study research strategy with success in carefully planned and crafted studies of real-life situations, issues, and problems. Yin (2014) strongly refuted the criticism of generalising a case study research by presenting a well-constructed explanation of the difference between analytic generalisation and statistical generalisation "in analytic generalisation, previously developed theory is used as a template against which to compare the empirical results of the case study (p.67)." Yin (2014) also pointed out that generalisation of results, from either 'single' or 'multiple' designs, is usually made to theory and not necessarily to populations. The inappropriate manner of generalizing assumes that some sample of 'cases' has been drawn from a larger universe of 'cases'. Thus, the incorrect terminology such as 'small sample' arises, as though a 'single' case study were a single respondent. Furthermore, Creswell (2014), Stake (2005) and Yin (2014) forcefully argued that the relative size of the sample whether two, ten or hundred cases are used, does not transform a 'multiple' cases into a macroscopic study. The goal of the study should establish the parameters, and then should be applied to all research. In this way, even a 'single' case study could be considered acceptable, provided it meet the established objective of the study.

Finally, Feagin *et al.*, (1991) asserted that "irrespective of the type, purpose, unit of analysis, or design, rigor is a central concern in case study research (p.7)". Consequently, case study research strategy excels at bringing researcher to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Yin (2014) affirmed that the use of case studies is only limited by lack of understanding of the types of applications, the types of research questions best addressed (as opposed to other strategies) and the type of case study design. The brief review and rejection of the case study criticisms above is not to say that the criticisms of the research strategy which are based on methodological and philosophical discrepancies are null and void, instead, such criticisms and critiques can be used beneficially to continually question the research strategy, prompt continual critical development and avoid method complacency in case study research strategy. In the next section, I will briefly review the constraints of case study research strategy.

3. CONSTRAINTS TO CASE STUDY RESEARCH STRATEGY

Case study research strategy can be complex and has its constraints because they generally involve multiple sources of data, may also include multiple cases within a study, and produce large amounts of data for analysis. However, Creswell (2014) claimed that many disciplines use case study research to build theory, to produce new theory, to dispute or challenge theory, to explain a situation, to provide a basis to apply solutions to situations, to explore, or to describe an object or phenomenon.

Yin (2014) agrees to some extent that there are shortcomings in the methodology of case study research, but contends that these shortcomings are not innate, and represent opportunities for development within the research strategy, or even more importantly, recognition of methodological constructs which are already known. For example, Yin (2014) asserted that case study research may not be considered as generalizable in some cases. However, according to Creswell (2014), rich, thick description allows readers to make decisions about transferability to another research context.

Stake (2005) argues that case study research can have general relevance, just not of the conventional kind. I will also argue that the beneficial tacit knowledge gleamed from case study research strategy is via a process of naturalistic generalization, which is facilitated by the indirect vicarious experiences prompted by a case study complete and

comprehensive knowledge of the particular case. This tacit knowledge is regarded as legitimate and worthy, whereas, the abstract propositional generalizations generated by social science projects are considered to, potentially, harbour oversimplification and misunderstandings, this is also supported by Stake (2005) who claimed that “generalisations can lead one to see phenomenon more simplistically than one should (p.23).” Some of the criticism against case study in this area relate to ‘single’ case study. However, this criticism is directed at the statistical and not the analytical generalisation, and that is the basis of case study research strategy. It appears that consensus exist in relation to the ideas that the fabrication of law-like universally applicable generalizations is not suited to case study research. However, a rejection of these broadly applicable generalizations does not prohibit the fabrication of generalizations in some form. Case study research can aid the understanding of social contexts beyond the site of data collection, if utilized aptly; thick descriptions are a necessity in order to permit similarities and differences between contexts to be analysed.

Gummersson (2007) poignantly note that all human behaviour is context dependent and therefore the attempt to fabricate law-like context-free generalizations is a fallacy, as “generalisations are not found in nature; they are active creations of the mind” (ibid.30). Accordingly, case study research places importance upon and pays attention to the context of social interaction and actors’ opinions. Yin (2014) replaces the idea of generalisability with that of fittingness. An intermediate position between generalizations and particularized knowledge is considered to both exist and to legitimate. However, any such fittingness-based transfers must be regarded as “indeterminate, relative and time- and context-bound” (Yin, 2014:62). Stake (2005) does not necessarily consider similarity between the original and new contexts a necessity in order for research knowledge transfer to occur. It is also argued that case study can beneficially transport a person to a place they have not been and of which they have no direct experience (for example, case study research can, in some sense, develop understanding and knowledge via a substitution for first-hand experience) (Yin, 2014). The vicarious experience of the research consumer (for example, the reader) is argued to originate from case study method’s representation of unique situations and unique individuals, consequently enriching the reader’s conception of the relevant topic.

Furthermore, construct validity is problematic in case study research. It has been a source of criticism because of potential investigator subjectivity. Eisenhardt (1989) proposed three remedies to counteract this constraint, using multiple sources of evidence, establishing a chain of evidence, and having a draft case study report reviewed by key informants. There is also the problem of ‘inferences’ in case study research strategy, and this can be dealt with by using pattern-matching technique in the analysis (Yin, 2014; Creswell, 2014; Stake, 2005).

4. CONSTRUCTION OF CASE STUDY RESEARCH

Since case studies are being deemed non-scientific, its lack of robustness as a research strategy and of questionable usefulness by its critics, constructing case study research design is of paramount importance. Furthermore, research design generally requires a choice of research strategy, a decision to use quantitative, qualitative, action research or case study etc. I will argue that all research strategies are equal and that there is no hierarchy of strategies. The merits of a particular strategy is inherently related to the rationale for selecting it as the most appropriate plan for addressing the research problem. Thus a researcher selects a case study research strategy because of the nature of the research problem and the questions being asked. Yin (2014) suggested three conditions that could determine the construction of case study research strategy: First, the type of research question; secondly, the degree of investigator control possible; and finally, the degree of focus on contemporary events desired. For reasons of space, I will briefly outline the suggested techniques by Yin (2014) for conducting case study research.

Step 1. Determine and define the research questions

The first step in case study research strategy is to establish a firm research focus to which the researcher can refer over the course of study of a complex phenomenon or object. The researcher establishes the focus of the study by forming questions about the situation or problem to be studied and determining a purpose for the study. The research object in a case study is often a program, an entity, a person, or a group of people. Each object is likely to be intricately connected to political, social, historical, and personal issues, providing wide ranging possibilities for questions and adding complexity to the case study. The researcher investigates the object of the case study in depth using a variety of data gathering methods to produce evidence that leads to understanding of the case and answers the research questions. Yin (2014:78) points out that “Case study strategy has considerable ability to generate answers to the question ‘why?’ as well as the ‘what?’ and ‘how?’ questions. The questions are targeted to a limited number of events or conditions and their inter-relationships. This review establishes what research has been previously conducted and leads to refined, insightful questions about the problem. Careful definition of the questions at the start pinpoints where to look for evidence and helps determine the methods of analysis to be used in the study.

Step 2. Select the cases and determine data gathering and analysis techniques

During the design phase of case study research, the researcher determines what approaches to use in selecting single or multiple real-life cases to examine in depth and which instruments and data gathering approaches to use. When using multiple cases, each case is treated as a single case. Each case's conclusion can then be used as information contributing to the whole study, but each case remains a single case. Researchers carefully select cases and carefully examine the choices available from among many research tools available in order to increase the validity of the study. Careful discrimination at the point of selection also helps erect boundaries around the case. The researcher must determine whether to study cases which are unique in some way or cases which are considered typical and may also select cases to represent a variety of geographic regions, a variety of size parameters, or other parameters. A useful step in the selection process is to repeatedly refer back to the purpose of the study in order to focus attention on where to look for cases and evidence that will satisfy the purpose of the study and answer the research questions posed. Selecting multiple or single cases is a key element, but a case study can include more than one unit of embedded analysis. The researcher determines in advance what evidence to gather and what analysis techniques to use with the data to answer the research questions. Data gathered is normally largely qualitative, but it may also be quantitative. Tools to collect data can include surveys, interviews, documentation review, observation, and even the collection of physical artefacts. The researcher must use the designated data gathering tools systematically and properly in collecting the evidence.

Step 3. Prepare to collect the data

Because case study research generates a large amount of data from multiple sources, systematic organisation of the data is important to prevent the researcher from becoming overwhelmed by the amount of data and to prevent the researcher from losing sight of the original research purpose and questions. Researchers prepare databases to assist with categorizing, sorting, storing, and retrieving data for analysis.

Step 4. Collect data in the field

The researcher must collect and store multiple sources of evidence comprehensively and systematically, in formats that can be referenced and sorted so that converging lines of inquiry and patterns can be uncovered. Researchers carefully observe the object of the case study and identify causal factors associated with the observed phenomenon. Researchers use field notes and databases to categorise and reference data so that it is readily available for subsequent reinterpretation. Field notes record feelings and intuitive hunches, pose questions, and document the work in progress. Researchers record testimonies, stories, and illustrations which can be used in later reports.

Step 5. Evaluate and analyse the data

The researcher examines raw data using many interpretations in order to find linkages between the research object and the outcomes with reference to the original research questions. Throughout the evaluation and analysis process, the researcher remains open to new opportunities and insights. The case study method, with its use of multiple data collection methods and analysis techniques, provides researchers with opportunities to triangulate data in order to strengthen the research findings and conclusions. The tactics used in analysis enable the researchers to move beyond initial impressions to improve the likelihood of accurate and reliable findings. Researchers categorize, tabulate, and recombine data to address the initial propositions or purpose of the study, and conduct cross-checks of facts and discrepancies in accounts.

Step 6. Prepare the report

Case studies report the data in a way that transforms a complex issue into one that can be understood, allowing the reader to question and examine the study and reach an understanding independent of the researcher. The goal of the written report is to portray a complex problem in a way that conveys a vicarious experience to the reader. Researchers pay particular attention to displaying sufficient evidence to gain the readers confidence that all avenues have been explored, clearly communicating the boundaries of the case, and giving special attention to conflicting propositions.

5. CONCLUSION

In conclusion, case study method can be abused by being employed in arbitrary and indefensible ways, however Yin (2014) claimed that social scientists have made wide use of case study research approach to build knowledge from observation of phenomenon within a contextually rich environment and contemporary real-life situations. Many studies rely upon case studies research, either for supporting information or for exposition of the main work. I therefore argue that it would be unfair representation of case study research strategy, if, as many critics contend that there is no real value to case study research. I am of the view that case study as a research strategy excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research.

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