Case Study Method: A Step-by-Step Guide for Business Researchers

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Abstract

Qualitative case study methodology enables researchers to conduct an in-depth exploration of intricate phenomena within some specific context. By keeping in mind research students, this article presents a systematic step-by-step guide to conduct a case study in the business discipline. Research students belonging to said discipline face issues in terms of clarity, selection, and operationalization of qualitative case study while doing their final dissertation. These issues often lead to confusion, wastage of valuable time, and wrong decisions that affect the overall outcome of the research. This article presents a checklist comprised of four phases, that is, foundation phase, prefield phase, field phase, and reporting phase. The objective of this article is to provide novice researchers with practical application of this checklist by linking all its four phases with the authors' experiences and learning from recently conducted in-depth multiple case studies in the organizations of New Zealand. Rather than discussing case study in general, a targeted step-by-step plan with real-time research examples to conduct a case study is given.

Introduction

In recent years, a great increase in the number of students working on their final dissertation across business and management disciplines has been noticed (Lee & Saunders, 2017). This article addresses key issues and challenges faced by the research students (i.e., up to PhD level) from these disciplines. The objective of this article is to present a step-by-step guide that research students may follow to save their valuable time reading through plethora of books on business research. The authors have recently conducted an in-depth case study in the Information and Communication Technology (ICT) industry of New Zealand. A multiple case studies approach was adopted that spanned over 2 years, as it is difficult to investigate all the aspects of a phenomenon in a single case study (Cruzes, Dybå, Runeson, & Höst, 2015). The purpose here is to suggest, help, and guide future research students based on what authors have learned while conducting an in-depth case study by implying autoethnography.

Case study method is the most widely used method in academia for researchers interested in qualitative research (Baskarada, 2014). Research students select the case study as a method without understanding array of factors that can affect the outcome of their research. Since considerable time and resources are required in conducting researches (General Accounting Office, 1990), any sort of misapprehension regarding the research objective and application of the methodology as well as the validation of the findings may lead to unintended negative consequences (Baskarada, 2014).

Although case studies have been discussed extensively in the literature, little has been written about the specific steps one may use to conduct case study research effectively (Gagnon, 2010; Hancock & Algozzine, 2016). Baskarada (2014) also emphasized the need to have a succinct guideline that can be practically followed as it is actually tough to execute a case study well in practice. This article is an effort to provide a step-by-step guideline along with its application to conduct case studies.

Due to the long-lasting significance of quantitative research methodology, most business researchers are trained extensively

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in quantitative methods as compared to qualitative methods (Eriksson & Kovalainen, 2015). Secondly, it has been observed that management researchers have quite limited repertoire of methodological approaches to work with while conducting the researches (Bazeley, 2015; Molina-Azorín & Cameron, 2015). The multiple case studies used in this article as an application of step-by-step guideline are specifically designed to facilitate these business and management researchers.

This article presents an easy to read, practical, experience-based, step-by-step guided path to select, conduct, and complete the qualitative case study successfully. As mentioned before, the objective is not to criticize or review the existing literature on case study method. Rather, attempt is made to synthesize what we already know for new researchers that can save their time and lead them toward a right direction. To conclude, there are two main objectives of this study. First is to provide a step-by-step guideline to research students for conducting case study. Second, an analysis of authors' multiple case studies is presented in order to provide an application of step-by-step guideline.

This article has been divided into two sections. First section discusses a checklist with four phases that are vital for successful completion of the case study. The second section explores these phases in practice through elaborating authors' case study application.

Background

Qualitative case study is a research methodology that helps in exploration of a phenomenon within some particular context through various data sources, and it undertakes the exploration through variety of lenses in order to reveal multiple facets of the phenomenon (Baxter & Jack, 2008). In case study, a real-time phenomenon is explored within its naturally occurring context, with the consideration that context will create a difference (Kaarbo & Beasley, 1999).

In qualitative research, case study is one of the frequently used methodologies (Yazan, 2015). However, it still does not occupy a legitimate position as a social science research strategy, as it does not have well-structured and fully defined protocols (Yin, 2002), so novice researchers who intend to use this methodology usually become confused about what a case study really is and how it is different from other types of qualitative research methodologies (Merriam, 1998).

There is an extensive literature available on the theory and practice of qualitative research (see Creswell, 2013; Glesne & Peshkin, 1992; Marshall & Rossman, 2014; Merriam & Tisdell, 2015; Patton, 1980, 1990); most of these studies discuss case study research in a cursory way (Hancock & Algozzine, 2016). Despite being one of the most commonly used qualitative research method in academic research, the researchers have not yet developed consensus on planning and implementation of case study, which impedes its complete evolution (Yazan, 2015). However, there are few studies on case study methodology (Hancock & Algozzine, 2016; Yin, 2017) that attempted to

synthesize the details to provide a complete case study research process with practical guideline.

Robert K. Yin, Sharan Merriam, and Robert E. Stake are the three influential authors who provide procedures to conduct case study research (Creswell, Hanson, Clark Plano, & Morales, 2007). They are the three foundational methodologists whose recommendations greatly impact academic researchers' decisions regarding case study design (Yazan, 2015).

Some famous books about case study methodology (Merriam, 2002; Stake, 1995; Yin, 2011) provide useful details on case study research but they emphasize more on theory as compared to practice, and most of them do not provide the basic knowledge of case study conduct for beginners (Hancock & Algozzine, 2016). This article is an attempt to bridge this gap by providing a systematic guideline to novice researchers to conduct case studies. Secondly, to provide an application, the guideline has been explored through multiple case studies.

Section I introduces the four phases of the proposed guideline to conduct case study along with the supporting literature review.

Section I

The checklist with four phases to conduct a case study is given below:

- Foundation phase
  a. Philosophical consideration
  b. Inquiry techniques consideration
  c. Research logic consideration
- Prefield phase
  a. Decide
  b. Case study protocol
- Field phase
  a. Contact
  b. Interact
- Reporting phase
  a. Case study reporting

Foundation Phase

This is the first and foremost step in conducting the case study. This phase is based on some considerations that research students should carefully look into. If there is ambiguity in understanding at this stage, it would result in chaos in the latter stages. The following section discusses the literature briefly followed by the examples from authors' case studies in Section II. This brief literature review will help research students to set the tone of reading regarding each of the considerations below:

a. Philosophical considerations

Understanding of research philosophy is crucial, as it builds the basis for how you approach your research (Wilson, 2014). The selection of philosophical paradigm emerges from the understanding of ontology, epistemology, and paradigm choices (Denzin & Lincoln, 1998). Every researcher should

familiarize, understand, and develop a stance that will eventually reflect in the mechanics of the research method. Researchers normally start their research with the brief understanding of whether their research methodology should be that of quantitative in nature making use of the numerical data (Maree, 2010) or that of the qualitative in nature employing descriptive data (Brynard, Hanekom, & Brynard, 2014).

Villiers and Fouché (2015) depicted a paradigm as a set framework making various assumptions about the social world, about how science should be concluded, and about what constitutes legitimate problems, solutions, and criteria of proof. Barker (2003) argued that paradigm is a model or pattern containing a set of legitimate assumptions and design for collecting and interpreting data. These definitions of the paradigm reveal that selection of qualitative or quantitative research methodology is dependent upon the underlying assumptions that constitute a valid research within the boundary of the social world and the identification of the problems and their resolutions. Research in various fields can adopt different paradigms (Coll & Chapman, 2000), which are all based on their own ontological and epistemological assumptions. For this reason, different paradigms hold different outlooks as to how they approach the problem and its solutions. Especially, this case becomes even stronger as to why the ontological and epistemological outlooks of the paradigms vary in nature, which is mainly attributed to the differing assumptions of reality (ontology) and knowledge (epistemology) that shape the particular research method (Maree, 2015).

Ontology. In the words of Crotty (1998), ontology is defined as "the study of being." Denzin and Lincoln (1998) described that ontology addresses the questions regarding nature of reality and nature of the human being in the world. It raises questions such as what is the nature of the world; what is real; and what counts as evidence? (Morehouse & Maykut, 2002). Whether reality exists independent of the researcher or it exists on its own has been a matter of debate among philosophers. Ontology is usually classified as *realist* and *relativist*. Realist ontology assumes that reality exists independent of observer's perceptions and operates according to immutable natural laws that often take cause/effect form, whereas relativist ontology assumes that there exist multiple, socially constructed realities ungoverned by natural laws (Guba & Lincoln, 2005).

A qualitative case study assumes relativist ontology. Relativist ontology excludes the possibility of a "true" construction. "There are only more or less informed or sophisticated constructions" (Guba & Lincoln, 1994). There is no objective world or truth; everything is relative and created by social beings. How we interpret the world belongs both to what is interpreted and to a system of interpretation. The world and the truth we perceive are products of our own mind and constructions of our own thinking. Moreover, there is no value-free research; everything is affected by the norms and values of the researcher, shaped by the culture and society. As human beings, we constantly construct the reality in which we live.

i. Epistemology

Epistemology emphasizes on the nature and origins of knowing and the construction of knowledge (Morehouse & Maykut, 2002). The choice of epistemology affects the choice of research methodology. Epistemology view is usually characterized as either objective; if the researcher sees knowledge governed by the laws of nature or subjective; if the researcher sees knowledge as something interpreted by individuals. If objective of the study is to create a more informed and sophisticated construction, then subjectivity of the researcher prevails.

ii. Philosophical paradigms

A paradigm is understood as "a basic set of beliefs that guides action" (Guba & Lincoln, 1994). A researcher's paradigm is a frame of reference one brings to a study. This philosophical framework is used to draw conclusions and develop findings about phenomenon. Paradigm provides convenient tools for researchers to identify and communicate specific perspectives and assumptions.

For the sake of building an effective research design, researchers have to take into account the research paradigm ensuring that it is in line with the stance of the researcher regarding nature of reality (Mills, Bonner, & Francis, 2006). There are three common and widely understood philosophical paradigms of research: positivism, critical theory, and interpretivism (Guba & Lincoln, 1994). These paradigms represent simplifications of the actual complexity of worldviews, which underpin different research perspectives. The nature of particular paradigm guides research projects and is impacted by different philosophical and practical considerations (Rabinowitz & Weseen, 1997). The following section presents a brief description of different paradigms.

Positivism. The ontology of the positivism approach is that of the realism or the common sense (Hudson & Ozanne, 1988; Scotland, 2012). According to positivist approach, knowledge can only be generated with the help of five primary senses (Greener, 2008). McKerchar (2008) stated that the positivist follows the realistic foundationalism ontology implying that the world exists independently of our observation, thus, suggesting an objective nature of world. Epistemology in this case also remains objective as the researcher commences research with an independent stance. Therefore, the researcher and phenomenon remain independent of each other.

A positivist understands the world as one objective reality. In the positivist philosophy, the researcher assumes that reality is objective and independently measurable by the researcher. Positivism aims to explain the world accurately and tries to understand the phenomena scientifically (Crotty, 1998). Positivist studies assume a priori constructs with fixed relationships that can be examined with structured instruments. Theories are tested to increase understanding of phenomena through quantifiable variables and testing of hypotheses.

Table 1. Research Logics Synthesized From Blaikie (2000), Jarvensivu and Tornroos (2010), Dubois and Gadde (2002), Dubois and Gadde (2014), and Thomas, 2010.

	Abduction (Systematic Combining)	Deduction	Induction
Aim	To understand social phenomena in terms of social actors' motives and understanding	To test theories, to eliminate false one, and to corroborate the survivor	To verify the theory by searching for the facts and to establish description of the patterns
Start	Related theories, observations of everyday accounts	Deduce hypothesis from a tentative theory	Tested theory
Finish	Tentative theory\framework	Hypothesis testing\theory testing	Theory verification and generalization\universal law
Researcher stance	Inquiry from inside	Inquiry from outside	Inquiry from outside
Researcher account	Respondent view explained by the researcher	Researcher's viewpoint	Researcher's viewpoint

Critical theory. Critical theory research suggests that reality is historically established, and it is produced and reproduced by people (Meyers, 2004). Critical studies seek to expose contradictions and flaws in social systems with a view to make some sort of transformational commentary or intervention. Critical theory views knowledge as inherently political; social scientists and social science are instruments of power. In critical theory research, the main goal is seen as being social critique, exposing inequities and conflicts in society.

Interpretivism. Greener (2008) described that interpretivism allows the researcher to have multiple views for a research problem because it allows the researcher to see the world through the eyes of the participants. From an ontological viewpoint, interpretivists are interested in the relativist or subjective realities that exist in any research issue (McKenna, Richardson, & Manroop, 2011). The epistemological stance of interpretivism is that of the subjective epistemology.

Interpretive paradigm emphasizes on social context (Orlikowski & Baroudi, 1991) and human complexity with regard to how people understand the phenomena (Kaplan & Maxwell, 1994). Interpretivist does not see the world in an objective light. Instead, individuals construct the world, each perceiving their own reality. Interpretive view suggests that meanings are constructed by human beings as they engage with the world they are interpreting (Orlikowski & Baroudi, 1991). To understand the world, these realities need to be understood. The interpretivist aims to achieve a deep understanding of the social phenomenon under study and recognizes the importance of participant's subjectivity as part of this process. Research participants use their own words while relating their experiences and beliefs.

b. Inquiry techniques considerations

There are two common inquiry techniques available to researchers while undertaking a research project: quantitative and qualitative. Inquiry techniques selection is somewhat affected by one's own philosophical stance. Positivist research is commonly linked to quantitative research methods, whereas interpretive research is linked to qualitative research methods.

Interpretivist answers the questions associated with credibility, conformability, transferability, and dependability, instead of the usual positivist criteria of reliability and generalizability (Denzin & Lincoln, 1998).

c. Research logic considerations

Induction and deduction are two common research logics used in social sciences research. Järvensivu and Törnroos (2010) suggest that researchers with realist ontological stance use deductive research process. Deductive research logic begins with theory and is aimed at testing arguments, whereas relativist start with subjective accounts of lived experiences on which theory is built inductively. These research logics are more prevalent as compared to a third one, that is, abduction coined by Peirce (1903). Järvensivu and Törnroos (2010) classified abduction as an approach to produce knowledge, which occupies the middle ground between. Similarly, Dubois and Gadde (2002) argue that abduction is about investigating the relationship between everyday language and concepts.

Drawing on work by various authors on research logics, Table 1 presents an overview of different research phases and appropriate strategies for each phase.

Abduction generates ideas and tentative theories that serve as hypothetical concepts (Thomas, 2010). Unlike induction, abduction accepts existing theory, which might improve the theoretical strength of case analysis. Abduction is flexible enough to allow a less theory-driven research process than deduction. An outcome of the abductive research is a framework that provides a tentative idea of what theory can look like.

Dubois and Gadde (2002) refer to the process of abductive research as "systematic combining." They argue that systematic combining is a process where theoretical framework, empirical fieldwork, and case analysis evolve simultaneously. This method is useful when the objective is to develop new theories and provide platform for future research.

Järvensivu and Törnroos (2010) suggest that abduction is an associated strategy of modern constructionism. The aim of abduction strategy is exploration and understanding of a social phenomenon through the lens of social actors. Abduction

claims that theoretical frameworks evolve simultaneously with empirical observation. The researcher interprets the empirical material and provides rich descriptions based on participants' views. Abductive process goes back and forth between empirical material and literature. Dubois and Gadde (2002) present four elements of an abductive research that are empirical material representing the reality, current literature or theories, the case that evolves gradually, and the analytical framework which is the outcome of the study.

The researcher consults literature for early idea generation to establish the research purpose. Empirical material is then collected and analyzed along by consulting literature. The researcher consults participants on multiple occasions to understand the social phenomenon in detail. Deductive research logic consists of "derivation of predictions" from hypothesis. The aim is to test the tentative theory that is generated at an abduction stage. This stage is also known as theory testing. Deductive strategy is associated with falsification (positivism) epistemology, where researchers deduce hypothesis from a tentative theory and test it.

The third step is induction, in which the tentative theory is verified. Induction strategy consists of "fact" searching that verifies the assumptions associated to the theory. Induction is also known as theory verification stage. If the facts cannot be found, the process begins again, and this is repeated as often as necessary until "fitting" facts are reached. Induction strategy starts with a tested theory, with an aim to finish with a universal law. The aim of inductive research project is to generalize.

Prefield Phase

This is the second phase in conducting case study. This phase discusses the operational details that should be carefully designed. This section discusses two operational steps and provides guidance to assist research students.

a. Decide

The first step is to ascertain whether case study is the most suitable choice as a method. Methods are "techniques for gathering evidence" (Harding, 1986) or "procedures, tools, and techniques" of research (Schwandt, 2001). Dubois and Gadde (2002) consider abduction as especially suitable for case studies in business research. Furthermore, Järvensivu and Törnroos (2010) also suggest that case studies are suitable for exploring business-to-business relationships and networks.

In selecting a research method and formulating research protocols, the idea should be to employ a method that allows the researcher to participate through observation of reality in real time and move freely between participants and literature with ease. Halinen and Tornroos (2005) define a case strategy as

an intensive study of one or a small number of business networks, where multiple sources of evidence are used to develop a holistic description of the network and where the network refers to a set of companies (and potentially other organizations) connected to each other for the purpose of doing business. (p. 1286)

Case study research consists of a detailed investigation, often with empirical material collected over a period of time from a well-defined case to provide an analysis of the context and processes involved in the phenomenon. The phenomenon is not isolated from its context (as in positivist research) rather is of interest precisely because of its relation with the context. Yin (1994) defines case study as an empirical research activity that, by using versatile empirical material gathered in several different ways, examines a specific present-day event or action in a bounded environment. Case study objective is to do intensive research on a specific case, such as individual, group, institute, or community. Case study makes it possible to identify essential factors, processes, and relationships.

In case studies, the research questions are often of "how do?" character instead of "how should?" (Punch, 2005). It is concerned with describing real-life phenomena rather than developing normative statements. These specific traits of case study allow the researcher to focus on individual's behaviors, attributes, actions, and interactions (Brewer & Hunter, 1989). Case studies are a preferred strategy when the researcher has little control over events and when the focus is on contemporary phenomenon within some real-life context (Yin, 1994).

b. Case study protocols

Case study protocol is a formal document capturing the entire set of procedures involved in the collection of empirical material (Yin, 2009). It extends direction to researchers for gathering evidences, empirical material analysis, and case study reporting (Yin, 1994). This section includes a step-by-step guide that is used for the execution of the actual study. It provides an overview of research questions, scope of research, and the focus of the study. Issues related to empirical material collection and step-by-step process including preparation of empirical material collection and preparation of interview guide are discussed. Case study protocol should include (i) research question, (ii) research method, (iii) permission seeking, (iv) ethical considerations, (v) interpretation process, and (vi) criteria for assessment. Application of these protocols is mentioned in Section II.

Field Phase

a. Contact

Being a qualitative study with interpretive stance, the involvement of the researcher in the process of empirical material generation and interpretation is crucial. Before the collection of empirical material, it is useful if the researcher knows the cases well and the participants who will be approached. This ensures a smooth process and builds a rapport among the researcher and participants. Before entering the field, it is important that the researcher is fully ready and capable to record the potential material that can help to create strong findings (Perecman & Curran, 2006).

b. Interact

The case study method involves a range of empirical material collection tools in order to answer the research questions with maximum breadth. Semistructured interviews can be conducted along with meeting observations and documents collection. Collecting empirical material from multiple sources allows triangulation (Yin, 2009). This combination of multiple sources of empirical material in a case study method is best understood as a strategy to add rigor, breadth, complexity, richness, and depth to the study (Flick, Kardorff, & Steinke, 2004).

Reporting Phase

Case study reporting is as important as empirical material collection and interpretation. The quality of a case study does not only depend on the empirical material collection and analysis but also on its reporting (Denzin & Lincoln, 1998). A sound report structure, along with "story-like" writing is crucial to case study reporting. The following points should be taken into consideration while reporting a case study. An application of these points is presented in Section II.

  i.   Case descriptions
 ii.   Participant descriptions
iii.   Relationship descriptions
 iv.   Details of field protocols
  v.   Empirical material interpretation and analysis
 vi.   Conclusion

Section II

Foundation Phase

a. Philosophical considerations

  i. Ontology

Authors conducted multiple case studies in the ICT industry of New Zealand in order to explore how integrating resources cocreate value. Literature reveals that in previous studies, empirical material was collected from managers and employees of the firms. Customers, who are believed to be the cocreators and assessors of value, have been neglected. In essence, the main objective of this article was to observe a real-life scenario where actors were involved in resource integration that resulted in the cocreation of value. Such kind of research case has not been explored earlier in the context of the ICT industry of New Zealand. Hence, the authors took the stance of relativist ontology, which assumes that reality does not exist; rather, it is an outcome of socially constructed perceptions free from natural laws (Lincoln, Lynham, & Guba, 2011).

  ii. Epistemology

A qualitative case study assumes subjectivist epistemology. The in-depth case studies conducted by the authors can be taken as an example in order to see the practical application of subjective view of epistemology. In this scenario, the authors had to interpret the reality subjectively, while assuming that the investigator and subject create understanding, and the phenomenon is explored as the process of investigation goes on. Due to the variable and personal nature, social constructions can only be refined through interaction between researcher and respondent.

  ii. Philosophical paradigm

Usually, the case studies conducted in business and management disciplines assume the interpretive paradigm. The objective of authors' case studies was to understand the process of value cocreation. This has been done while visiting the context, interviewing actors involved in the process, making notes of meetings/projects, and finally interpreting the findings through respondents' eye. Interpretive paradigm based on relativist ontology and subjectivist epistemology is the preferred option where meanings are constructed socially.

  b. Inquiry techniques considerations

The authors' decision to conduct case study research with qualitative methods was based on various reasons. Firstly, the nature of problem under investigation required an in-depth exploration of the phenomenon. Exploration helped to dig deep into participants' thoughts to understand how value cocreation process was taking place. Qualitative technique is suitable in this context as this approach is used for exploring the meanings, individuals, or groups attached to a person or a social issue (Creswell, 2013). Majority of the research on value cocreation has employed various qualitative methods that support qualitative method as a valid research method.

Secondly, value is contextual and determined by actors involved in the cocreation process (Vargo & Lusch, 2008). Individual's experience, emotions, relationship, learning, and so on affect the realization of value. To understand the meanings and the sources of value, qualitative approach is appropriate. The qualitative perspective allows informants to "use their own words to draw on their own concepts and experiences" (Orlikowski & Baroudi, 1991). This allows a broad understanding of the concept and identifies areas and discussions that are yet to be reported.

Thirdly, the case studies aimed to discover the processes involved in value cocreation. Therefore, it is closer to "theory creation" research rather than "theory testing." Informants were approached in a natural setting to discover what was to be known about the phenomenon. The goal was to discover patterns containing evidences of collaboration among actors, which emerged after observation, careful documentation, and thoughtful interpretation of the empirical data.

  c. Research logic considerations

Authors used abduction as research logic for their multiple case studies. The selection of abductive stance was rationalized on three main reasons. Firstly, the primary research objective

was to understand the value cocreation process as it happens. Abduction logic of enquiry is based on the epistemology of interpretivism (Järvensivu & Törnroos, 2010). The viewpoint of social actors or participants was the main focus of the analysis. Secondly, the objective of study was to elaborate the value cocreation process empirically. The goal was to create a framework for future research as pointed out by Dubois and Gadde (2002). The outcome of those case studies will be used as a starting point of deductive research that can then be followed by an inductive research study in different behavior specimens to achieve generalization. Thirdly, keeping in mind the interpretive stance, and limited number of empirical studies available in Service Dominant Logic (SDL) and value cocreation, hypothesis generation was not appropriate.

2. Prefield Phase

Research study protocols.
i. Research questions

The first step in case study protocol is designing the main question and subquestions. The main objective of authors' study was to understand how integrating resources cocreate value through the lens of S-D logic of marketing. Therefore, the primary research question of the study was: How does integrating resources cocreate value for all actors? Subresearch questions were formulated like:

> Subquestion A: What are the natures of value realized by actors?
> Subquestion B: What resources support value cocreation?
> Subquestion C: What are the stages in value cocreation?
> Subquestion D: What is the nature of interactions that are part of value cocreation?

The starting point of that case study was not a conceptual framework, propositions or hypothesis. In fact, the familiarity with the value cocreation literature and relevance of S-D logic identified the motivation of investigating the research questions.

ii. Research method

Authors used multiple case as a suitable strategy for their research. Following the interpretive stance along with abductive research logic, the empirical material focused on the experiences of actors, which helped in explaining the process of value cocreation in the ICT industry of New Zealand. Actors' accounts and experiences were taken into consideration and literature was used to move back and forth for interpretation of collected empirical material. Social actors representing ICT systems integrators (vendor) and clients were the sources of empirical material collection. The main tools to collect empirical material were semistructured interviews, augmented by participant observations, documents including e-mails, project reports, and meeting notes. Empirical material was managed and stored in NVivo 10 software. Four steps of

interpretation process were used to address the empirical outcome to seek the explanation for research questions. Cooperative research process (Gummesson, 2008) was employed to verify the interpretation of the material as well as the generation of the framework of value cocreation. Interpretation of empirical material by researchers was presented to the participants for their feedback.

iii. Permission seeking

One of the most important steps in any research is permission seeking in a timely manner. Current employment and personal contacts can play a crucial role in selecting relevant projects. In authors' case studies, permission was taken at two levels. First level is called gatekeeper permission. The information about vendor was requested from client firm. Client firm was approached first, and project managers of ICT projects at client firm were requested for further information about the project and vendors. Second level of permission was related to the participants. It was ensured that participants should be given enough information to make informed decision regarding their participation.

iv. Ethical considerations

Ethical considerations are very critical to any research. It is imperative that proper steps are taken to ensure that participants are fully aware about their participation and role. In order to safeguard the participants' rights and firms' information, authors took the following steps in the case study:

1. Firms were not named in the report due to their affiliation with government departments.
2. The privacy and confidentiality of firms and individuals were protected during and after the research process.
3. Participants were provided with consent forms and information sheets.
4. There was no deception at any stage in the research process. Participants were made fully aware of what was expected.

v. Interpretation process

Themes generation and coding is the most recognized and used analysis method for qualitative empirical material. Text is used for analysis in such studies. In authors' study, the systematic process of interpretation started with the initial transcription of audio recording of interviews. During the course of empirical material collection, transcription was done regularly on NVivo software. The reason of transcription during the empirical material collection stage was to modify the interview guide for future interviews. Initial transcriptions of the interviews were then followed by cross-checking with field notes that were developed by authors during the interview stage. The point of cross-checking the transcribed interviews with field notes was to see whether any details were missed during the transcription.

A cooperative research process (Gummesson, 2002) was followed. It ranged from the verification of interview transcription, empirical material interpretation, and discussion of the final framework. By doing this, participants were provided a chance to verify whether the transcription/analysis was accurate. Interactions with research participants play an important role in idea generation and concept testing. This process also allows informants to provide feedback and suggestions to further improve and strengthen the findings of the study. Cooperative research process was also used by Payne and Storbacka (2009) in the development of brand cocreation model. After this feedback, the transcribed interview texts were coded and concepts were developed. These concepts were then combined to develop categories. These categories and results of interviews' interpretation were triangulated with meeting observation field notes and documents.

The authors used four-step approach: prepare, exploration, specification, and integration (PESI) for empirical material interpretation. In addition to this, general approaches to coding steps as suggested by other qualitative researchers (Coffey & Atkinson, 1996; Flick et al., 2004; Hesse-Biber & Leavy, 2011; Yin, 2009) were also used. PESI approach provided a more organized and systematic way of interpretation that helped in reporting the empirical material in a more effective way.

The first step is called preparation. In this step, familiarization with the empirical material was done. Furthermore, empirical material was carefully organized, sorted, and an interpretation frame was developed. This step is also referred to as "playing with the data" (Yin, 1994). Data processing is considered as one of the toughest phases of qualitative research (Jandaghi & Zarei, 2010). This step included a number of different tasks such as reading interview transcriptions, reviewing field notes, organizing and reading documents, and also referring back to literature review. Along with these tasks, four interpretation frames were also developed. The interviews were conducted in a way that the discussion flowed loosely in an order of subresearch questions in mind. Once the transcribed text was in NVivo, text was divided carefully and allocated to four frames. These frames were developed based on subresearch questions.

1. Nature of value realized.
2. Resources and actors' classification.
3. Steps in value cocreation.
4. Nature of interactions.

These four frames provided a focused approach to the text interpretations. It kept the authors on track of addressing the research questions rather than detracking during text interpretation. These frames also worked as a screening technique to focus on only that part of text, which helped in addressing the research questions. It is always the job of the researcher to comb through the raw empirical material to determine what is significant and transform it into a simplified format that can be understood in the context of the research questions.

The second step is called exploration. In this step, initial codes were developed and concepts were finalized. A number of key codes from all the codes that were developed were transformed into concepts based on differences and similarities. Also, in this phase, the less important codes were subsumed under the key codes. Third step is the specification phase, where the goal of interpretation was to look for connections between concepts and develop a category consisting of various concepts. Patterns were carefully observed, and based on these patterns and understanding of literature, categories were developed.

The final step is of integration. At this step, empirical material interpretation from one case study was compared with another case to reveal cross case patterns. This final step helps in establishing a framework for the concept under study.

vi. Criteria for assessment

Reliability and generalizability are the two main criteria for assessing a research study. However, reliability and generalizability criteria are related to the positivist approach to case studies (Beverland & Lindgreen, 2010); hence not applicable to authors' study. The intention of the qualitative research is the interpretation of the events and not to generalize the findings (Merriam, 1988). Qualitative research and social phenomena by their nature cannot be replicated as the real-world changes (Marshall & Rossman, 2006; Strauss & Corbin, 1998). Each interpretation is unique; replication, therefore, is impossible (Easton, McComish, & Greenberg, 2000). This uniqueness of qualitative research makes the debate of reliability and generalizability irrelevant. However, for any qualitative research, internal validity (Merriam, 1988) or "authenticity" (Ghauri, 2004) is the main issue. In other words, "how congruent are one's findings with reality?" (Merriam, 2002). Addressing these issues, Lincoln and Guba (1985) argue that qualitative empirical material interpretations can be improved by credibility, dependability, transferability, and conformability. Furthermore, Merriam (2002) argues that reliability in qualitative research can be defined as dependability and consistency, and the results make sense when they are consistent and dependable.

Field Phase

a. Contact

Contact can be clarified with the example of authors' case study in which empirical material collection was done through in-depth interviews. Authors arranged three interviews with project manager (vendor—Interviewee 1), database designer (vendor—Interviewee 2), and logistics supports manager (client—Interviewee 3). Observation of meetings and review of documents such as meeting notes and project reports were also taken into consideration to strengthen the arguments. The objective of conducting interviews with participants was to discuss the process of the software development. The interviews conducted revolved around experiences, motives,

Table 2. Empirical Material Discussion Pointers.

Focus (Research Questions)	What I Was Looking for?
Components of the value cocreation process	• Process of collaboration during the project • Process of the idea generation, transfer, and execution
Nature of value realized	• Value definition • Collaboration outcome • Organizational vs. personal achievement
Resources utilization and integration	• Resources types • Level of resources and its impact on cocreation process
Networks involvement	• Who is involved? • How important is the involvement? • Does involvement matter?
Communication	• Language of cocreation

Table 3. Sources of Evidence and Focus.

Source of Evidence	Focus
Participant interviews	Discussions were based on role, contribution, interaction with other actors, and process of feedback during the project.
Meeting observations	Various aspects such as experience, interaction, participants learning, and so on were observed and analyzed in order to map out the value cocreation process.
Project reports	Project reports were key to provide an overview of the whole project, team members' details and history, and the operations of the project.
End user feedback documents	The feedback itself is not key, but the process of achieving the feedback and transferring it to other actors is important.
Meeting notes	Meeting notes were used to make sure nothing is missed during meeting, and it also helped to support field notes taken during meeting observation.

process, learning, and outcomes of the collaboration. Questions were not asked in a predefined structure; however, the authors prepared a list of issues that were needed to be discussed. For instance, during the pilot study, authors conducted the discussion in a way that participants were able to explain the key issues surrounding the discussion pointers given in Table 2.

b. Interact

Designing of field protocols is always time-consuming. Literature provides a list of reading material that assists researchers to use empirical material collection method. It is always a good practice to develop clarity and justification before using each source of evidence. Table 3 is shown as an example from authors' case study that identified the processes of value cocreation between vendor and client.

Reporting Phase

i. Case descriptions

Case in the case study should be selected very carefully and presented in an easy to read format. For example, if the study is about the process of collaboration among vendor and clients, then it should clearly be showed as shown in the Table 4.

ii. Participant descriptions

Description of participants along with their working and involvement level in the case under study should also be reported clearly. Sometimes, detailed description is not possible due to ethical considerations. However, a short overview must be added in order to give the reader an idea about actors involved. Table 4, extracted from the authors' case study research, describes a short profile of participants. Besides this, authors have also explained in detail about the professional profile of each actor involved in the project and how he or she is creating value in the system under study.

iii. Relationship descriptions

Relationship among participants should also be observed carefully and reported accordingly. In the authors' case study research, there was an established relationship between actors. Both main actors have worked on ICT projects previously. Personal- and firm-level connections were observed during empirical material collection. Furthermore, it was also observed that participants knew each other before starting the ICT project.

iv. Details of field protocols

This section of the report presents the step-by-step guide that was used during the execution of case study. It aims to highlight the key procedures planned before carrying out the case study. It provides an overview of research questions, scope of research, and the focus of the study. Issues related to empirical material collection and step-by-step process including preparation of empirical material collection and preparation of interview guide are discussed. The later part of the section maps out and discusses the interpretation strategy used for the generation of results and findings.

v. Empirical material interpretation and analysis

Themes generation and coding is the most recognized data analysis method in qualitative empirical material. The authors interpreted the raw data for case studies with the help of a four-step interpretation process (PESI). Raw empirical material, in the form of texts from interviews, field notes of meetings, and observation and project reports, was arranged and sorted in NVivo. Since the empirical material from interviews was rich in nature as compared to other sources, an in-depth interpretation of text was first done on interviews. The interpretation process started with initial coding of subconcepts, main

Table 4. Case Description.

Case	Description	Location	Participants
CRM software project	A CRM software project between an American-owned Information and Communication Technology (ICT) services provider in Auckland and its client. Client is a service providing firm with business- and consumer-level customers. Vendor developed a CRM software for client, based on the specification given by client. The client was using an older version of CRM software developed by same ICT service provider, and the relationship between firms was established. This project included updates, complete interface overhaul, database security improvements, and feature additions.	Auckland, New Zealand.	All participants involved in the ICT project representing vendor and client were treated as social actors for the purpose of this research. It included low-, medium-, and high-level employees.
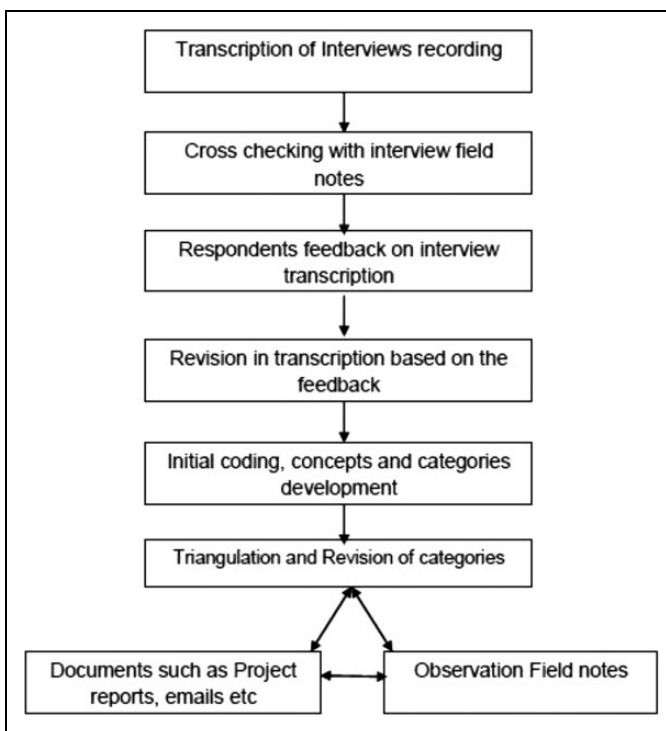
Figure 1. Empirical material interpretation process.

concepts, and finally the development of categories. The categories developed from interviews were then triangulated with observation of field notes and documents. The outcome of empirical material interpretation is presented in the form of few frames. Figure 1 provides an overview of the empirical material interpretation process followed by the authors' case studies.

vi. Conclusion

The last part of the report is comprised of conclusion, which should be written in a way that could give the reader a comprehensive view about the exploration of focal issue of the case study and how the researcher progresses toward meeting the research objectives. Conclusion is the summary of the case profile, facts, and resolution of the problem under study.

Discussion and Conclusion

This article is written with a specific purpose to provide a case study guide to research students of business and management disciplines specifically. Authors share their experiences that they gained while conducting case studies. The issues and challenges that were faced by the authors are pointed out in the form of practical solutions. By providing specific examples and experience-based recommendations, a comprehensive checklist has been presented. Each phase of the checklist includes specific issues that need addressing. A thorough understanding of the issues pertaining to each and every phase of the checklist is necessary for effective completion of a case study research.

The first phase is the foundation phase of the case in which the researcher needs to work on the philosophical assumption. A comprehensive understanding of the research concepts as well as the purpose of the case study to be carried out is essential for the effective and efficient completion of a case study research. The basic research philosophy and its thorough understanding will enable the researcher to decide which path to follow for the achievement of goals set by the researcher. Hence, it is important for the researcher to have a clear understanding of the problem/issue at hand and the results a researcher wants to achieve from carrying out a particular research. This understanding of the process is vital for the case study researcher in order to decide what to look for, how to look, and where to look for the required information. The researcher must have a clear understanding of the aims and objectives of the study while approaching the participants, and the whole processing of engaging the participants should be designed very carefully with the intent of getting the desired information out of them.

Foundation phase also includes research inquiry techniques based on the philosophical stance formed earlier. Positivist research is commonly linked to quantitative research methods, whereas interpretive research is commonly linked to qualitative

research methods. The last part of the foundation phase is based on research logic consideration. Induction and deduction research logics are commonly used in the field of social sciences as compared to a third logic called abduction.

The second phase of the checklist is prefield phase, which comprised of a step-by-step research protocol guide that highlights the key procedures designed before conducting the case study. It is based on designing research question, research method, ethical considerations, gathering of evidence, empirical material interpretation, analysis, and so on.

The third phase is the field phase where actual contact and interaction with the participants is managed. Based on abduction strategy, this step is the most crucial step, as it enables the researcher to explore and understand a social phenomenon through the eyes of social actors. The research protocol guide designed in the second phase of the checklist ensures that participants are aware about their contribution in the research. Moreover, it helps in protecting the rights of participants and maintaining the firms' confidentiality.

The last phase of the checklist is the reporting phase, where the description of cases and participants is presented. It also documents the details of research protocols, empirical material interpretation, and analysis. At the end, the report is concluded with the summary of case profile, facts, and resolution of the problem under study.

The checklist provided in this article will help the future researchers in deciding the starting point for their research. It will be like pulling the loose end of the complexly and intricately woven fabric, which then unfolds the whole fabric bit by bit. Once the researcher is capable to decide which path to take for the research, further stages will set their own path for the researcher to follow. After reading this article, research students should be able to conduct and complete a quality case study project in a well-defined manner. Extant literature available on case study method should be used in conjunction with this article to develop a good quality case study research.

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