## **SAGE Research Methods Cases Part 1**

# The Role of Context in Qualitative Case Study Research: Understanding Service Innovation

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## **Abstract**

Case study research designs are a popular approach in business and management and in workbased research projects. Case study as an umbrella research methodology, under which a researcher adopts different methods for data collection and analysis, is a particularly useful approach for research projects concerned with an in-depth investigation of a particular phenomenon within a specific real-life context. The context in case study research plays a key role, and a researcher needs to carefully consider the choices of "case" or "cases" in terms of value and uniqueness. The role of the researcher as an embedded researcher is also important as case study research offers a degree of understanding of the context under study that can only come from personal experience and involvement. There are many approaches to case study research; this SAGE case study presents and discusses a case study research design using qualitative methods for data generation such as participant observation, direct observations, and interviews (with individuals and in a group) to investigate the implementation of a service innovation process. This research approach was found useful, as the outcome of the study was intended to be an in-depth understanding of the service innovation process (the phenomenon) that was embedded within the context-specific settings of a small business services firm (the context).



## **Learning Outcomes**

By the end of this case study, students should be able to:

- Define the characteristics of a case study research design
- Critically evaluate the role of context and the embedded researcher in case study research design
- Understand the benefits and challenges of undertaking case study research
- Critically justify the appropriateness of a case study research design for achieving the research aim and answering the research questions

## **Project Background**

The research project was designed to explore in-depth the early steps of the implementation of a novel New Service Development (NSD) (or service innovation) process for the development of new services within a small business services firm. The review of the literature suggested that there is a plethora of research about the New Product Development (NPD) process for new goods (Holzweissig & Rundquist, 2017; Papastathopoulou & Hultink, 2012) implemented in the manufacturing sector. However, research about the NSD process in the service sector was yet fragmented and underdeveloped (Biemans et al., 2016; Kuester et al., 2013). The literature did not offer adequate guidance on how NSD processes can be implemented within service firms (Biemans et al., 2016; Tether, 2005). Much of the literature relied on large-scale surveys to study the innovation process in the manufacturing firms, whereas there was a lack of in-depth studies into how service firms actually develop new services. The research project was developed to address calls for research requiring the adoption of a (longitudinal) single case study research design (Kuester et al., 2013; Papastathopoulou & Hultink, 2012) and moreover chose a particular context of under-researched area of small services firms serving business-to-business (B2B) markets (Biemans et al., 2016). A case study research design is an in-depth investigation of a contemporary phenomenon within its real-life context (Yin, 2018). The choice of case study design felt appropriate as the context was relevant to the phenomenon. The research sought to investigate the NSD implementation (the phenomenon) within a small business services firm (the context). In other words, the specific context of the case organization within which the specific problem existed was a key consideration in the research. Therefore, the case study research design was a useful approach to study the NSD implementation and the role of the organizational context in terms of the critical factors affecting the implementation and how the challenges were overcome by the participants, in order to manage the implementation. Research has shown that NPD processes are largely implemented in the manufacturing sector leading to increased innovation productivity, whereas there is little empirical evidence about how small and medium enterprises (SMEs) organize and manage their innovation process. Given the SMEs' economic importance, the research questions addressed: "What are the critical factors affecting the implementation of a systematic NSD process?" and "How can a B2B service SME manage NSD process implementation?" (Davies & Warren, 2019). In focusing on these questions, the particular context-setting allowed longitudinal observations (18 months) of the implementation of the NSD process and the case study research design allowed the researchers to generate multiple sources of evidence through the application of different qualitative methods and to draw on the experiences and perspectives of different participants in terms of how to organize and manage service innovation.



## **Section Summary**

- NSD in the service sector is an under-researched area.
- The study addresses two of the under-researched aspects of NSD research concerning the nature of the firms (services sector) and the markets served (business services).
- A case study research is useful when the context within which the problem or phenomenon under investigation exists is relevant and requires careful consideration in the research.

## **Case Study Research Design**

Some authors describe case study research as a research method (Baškarada, 2014; Rashid et al., 2019); however, a case study is more commonly described as a research strategy, methodology, or design (Hartley, 2006; Saunders et al., 2019; Stake, 1995; Yin, 1984, 2011). A case study is an approach to research which a researcher needs to design and through which they use a range of methods for data generation and analysis to answer the research question(s). The case study research focuses on understanding a particular "case" by accessing data from a range of different sources of evidence generated through a multimethod approach and from multiple perspectives which are the key defining characteristics of case study research (Yin, 2011). Another important feature of case study research is related to the study of a contemporary phenomenon which is not detached from the context (Hartley, 2006; Yin, 1984, 2011). In particular, the case study research is directed towards the understanding of a specific phenomenon which is rooted in a specific and real-life context (Stake, 1995). This may mean that a researcher may be looking at a phenomenon (issue or problem) within a single organization or a specific issue across several organizations. A researcher can choose between a single case or multiple cases; however, the decision should consider their research aim(s) and research question(s). A case study research is used to generate empirical evidence to investigate a problem within its real-life context. Therefore, another important consideration that needs to be made is related to access to evidence and participants as often the researcher plays the role of an embedded researcher to generate contextualized data and provide insight from the in-depth investigation of a particular phenomenon (issue or problem).

The starting point of conceptualizing a case study research is the phenomenon itself rather than the methods; thus, a case study design acts as a broad umbrella under which different methods for data generation and analysis can be used. The reason for the need to use multiple data sources for evidence (Yin, 2018) is related to another defining characteristic of case study design which implies that the boundaries between a phenomenon and its context are not well defined (Yin, 2018).

The research project was designed to obtain insights by conducting research close to a case study organization's normal operations, through interactions with the participants (<u>Davies & Warren, 2019</u>). The choice of case study research design allowed the research to include arrays of data-generating qualitative methods such as participant-observation, direct observation, interviewing participants, interviews in groups, online questionnaire, and documentation (<u>Easterby-Smith et al., 2002</u>; <u>Gummesson, 2000</u>; <u>Saunders et al., 2019</u>; <u>Yin, 1984</u>) that were useful in answering the research questions. The emphasis was on the choice and appropriateness of methods selected to investigate the phenomenon in its context as each method allowed the exploration of different aspects leading to the answering of the research questions.

To allow wider interpretations and insights to be drawn, the research involved all those participating in the innovation practices in the organization, including decision-makers, middle managers, and employees at lower hierarchical levels and the firm's external networks. In total, 45 participants were involved. During the research, around 100 meetings were observed, and the entire implementation of the innovation process, from the start to the launch of a new service, was studied. The aim was to understand and explain participants' perspectives and take account of the different experiences and actions to innovation events and situations and unearth different insights by trying to understand what was happening within the context of the organization's setting (Warren, 2015). The role of the researcher as an embedded researcher was important as the case study research offered a degree of understanding of the context under study that can only come from personal experience and involvement (Gummesson, 2000).



## **Section Summary**

- Case study research is a research strategy and attention should be paid to understanding the key characteristics defining the case study research design.
- A case study research design allows a researcher to conceptualize the phenomenon rather than the methods, and then use an array of different methods to unearth the phe-

nomenon within its context.

 A researcher can choose between single or multiple cases according to the research aim.

## **Case Study Research Design in Action**

There are many approaches to case study research; this SAGE case study focuses on an example of a case study research design that uses qualitative methods. The decision around the choices of methods should be based on the aim of the research, and a researcher should bear in mind that the phenomenon and its context come before the choice of methods. Stake (1995, p. 435) states: "Case study is not a methodological choice but a choice of what is to be studied. ... We concentrate, at least for the time being, on the case." This implies that the defining characteristic of a case study is the specific "unit of study," also known as the "unit of analysis." Therefore, one may argue that the starting point of selecting a case study begins with a research problem, which involves the identification of a lack of knowledge about a particular phenomenon (issue or problem). Identification of the phenomenon then leads to the development of appropriate research aim(s) and question(s). The research aim(s) and question(s) then allow the researcher to determine whether a case study research is an appropriate design for their research project.

Yin (1984) defines a case study as "an empirical enquiry that investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and the context are not clearly evident, and in which multiple sources of evidence are used. It is particularly valuable in answering who, why and how questions in management research" (p. 4). Yin (2018) suggests that research questions focusing on "how" or "why" offer an in-depth understanding of a phenomenon. Once a researcher has made the decision to carry out a case study research design, the attention is turned into decisions around selecting the case itself. Yin (2018, p. 30) mentions two requirements: "defining the case and bounding the case." The decisions around these two requirements are related to clearly (1) defining the case, which can be a person, event, location, organization, or phenomenon and (2) establishing the boundaries of what will be studied and what will not be studied, which leads to establishing the "unit of analysis." Once the case has been identified, a researcher

can move on to making decisions around the types of evidence needed and how that evidence will be generated.

In our experience, identifying the unit of analysis is the most challenging aspect of case study research design. This relates to the need to define the characteristics of the case study, but commonly, the boundaries between a phenomenon and its context are not well defined (Yin, 2018). If a researcher conducts a case study within the organization they work for, they may consider the whole organization as a case study and loosely define the case or unit of analysis. One way to deal with this situation is to carefully consider what it is they are actually trying to study and achieve. This iterates back to the choice of research aim(s) and question(s) which drive the research design.

The research project sought to investigate the NSD implementation, which was defined as the phenomenon or case, whereas the phenomenon was taking place within a small business services firm which was defined as the context of research. The case was bounded around studying the stages of the NSD process from the perspectives of those involved in the innovation activities. Other organizational processes, projects, activities, and people were left out of the scope of the study.

The essence of the case study design is to focus on the understanding of a phenomenon and its context. Therefore, the research context plays an important role in case study design. The reason for this is that the organizational context is as important and relevant to the research outcomes as the theoretical underpinnings. A case study allows researchers to analyse the context and the processes which illuminate the theoretical issues being studied (Hartley, 2006). Therefore, the decisions around the choice of the case study should be made around the value and uniqueness of studying the case and the context itself, in addition to some practical decisions around the access to a case and the participants.

The research project selected an organization which represented an *extreme* case and context that it was worth documenting and analyzing (Yin, 1984). The unique circumstance of the case was related to the fact that the organization delivered services on behalf of the public sector and did not have experience in developing its own business services (Warren, 2015). The organizational context also offered an opportunity to observe and participate in the implementation of a new business process for the development of new services, of which there is little research account evidence in the innovation management literature. Therefore, the case and the context itself provided a rationale for "if it can work here it will work anywhere" scenario (Robson, 2000, p. 182). Moreover, the research demonstrated that investigating the organizational context and the implementation of the service innovation process, and the changes that such an activity can bring to

a specific organization's practices, contributed considerably to practice and illuminated the theoretical issues being studied as suggested by <u>Hartley (2006)</u>.

A strength of the case study approach is considered to be the possibility to "catch" (Stake, 1995, p. xi) a single case's particularity and complexity and to investigate a contemporary phenomenon in depth and within its real-life context (Yin, 1984). Case study can be particularly useful in the applied social sciences (Gummesson, 2000). Alloway, (1977, p. 3), cited in Gummesson (2000) stated that: "research addressed to practitioners...carries the additional burden of drawing recommendation from the findings which are, one, understandable and two, implementable. The familiarity of a managerial audience with the language, data format, and analyses used in case research is, alone, a major advantage. Further, the conceptual and descriptive richness of the data gathered enables the practitioner to assess for himself [sic] the applicability of the findings to his [sic] circumstances." In that sense, the case study methodology fits well with pragmatism as a research philosophy, as this supports the belief that knowledge is appraised according to its usefulness by the practitioners who will reject propositions that they find of no use.

In the research project, an existing but limited theory on NSD processes was explored by applying it to and within a specific single case study. The choice of the research design enabled the existing theory to be challenged and offered an opportunity to build a new theory, through the application of an innovation process developed initially for goods and then applied to a service firm context (Warren, 2015). The research project was not directly concerned with generating theory per se as a primary goal, or confirming the established theory, but was rather a problem and real-world practice oriented.



## **Section Summary**

- The research project explored the NSD process implementation in the context of a small business services firm.
- Consideration should be given to the choice of case and context in terms of value and uniqueness.
- Multiple methods and multiple perspectives allow an in-depth investigation of an issue in its context, leading to the answering of the research questions.
- Case study research that is concerned with specific problems and is real-world orientated offers a contribution to both theory and practice.

#### **Practical Lessons Learned**

A researcher needs to consider the appropriateness of case study design to their specific research project. Case study research design is particularly appropriate if a researcher wants to explore, understand, or explain "how" or "why" a phenomenon within a particular context is happening. The case study research design has further benefits especially if the literature on the topic is limited in a particular field. Since the literature offered little guidance about the implementation of an NSD process within service firm settings, the case study design offered an opportunity for the researcher to provide a novel account of what happens with the introduction of a new NSD process (Warren, 2015).

Case study strategy has a particular advantage as it offers an opportunity to view process facets and use the researcher's unique capacity to make sense of what is happening: "the detailed observations entailed in the case study method enable us to study many different aspects, examine them in relation to each other, view the process within its total environment and also utilize the researcher's capacity for "Verstehen" [understanding]. Consequently, case study research provides us with a greater opportunity than other available methods to obtain a holistic view of a specific research project" (Valdelin, 1974, p. 47, cited in Gummesson, 2000).

One of the authors of this SAGE case study was allowed as a researcher to "interact closely" with the case study participants and acted as an "active participant" in solving problems and challenges related to the implementation of the NSD process. Other researchers if they are granted access to a context-specific setting over an extended period of time would be able to translate existing but limited literature into the context of their choice. The role of the researcher as an embedded researcher can be challenging yet rewarding. Gummesson (2000) description of the action scientist can be similarly related to the embedded researcher and could be quite illuminating: "[Action scientist] must be able to balance a schizophrenic personality and get the best out of Dr Jekyll as well as Mr Hyde. It means that they must handle both the client's interests and the interests of science" (Gummesson, 2000, p. 119). The research project allowed the embedded researcher to develop theoretical and empirical insights through the exploration of early stages of the implementation of an NSD process and contributed to the organization both by helping the participants to adapt and improve the usefulness of the process and extended the theoretical knowledge about the new NSD process itself and its implementation.

Since case study research investigates a contemporary phenomenon, a researcher should expect an element of uncertainty as at times they will have little control over what happens in the phenomenon. Choosing a flex-

ible qualitative design should enable a researcher to provide a detailed description of the phenomenon and offer an enhanced overall understanding of it as the purpose of a qualitative case study research is not to understand the effectiveness or cause. Other researchers should be aware that a case study research begins with an overall research aim and a clear research problem, followed by research questions that focus on "how" and/or "why" which will allow them to provide "an extensive and 'in-depth' description of some social phenomenon" (Yin, 2018, p. 4).



## **Section Summary**

- Consideration should be given to the appropriateness of the case study design to the specific research project.
- Case study strategy offers an opportunity for an embedded researcher to study a particular phenomenon and use their unique capacity to make sense of what is happening in the specific context.
- Researchers should be aware that a case study research begins and is driven by the
  research aims and questions, research problem, and research questions starting with
  "how" and/or "why" are more appropriate.

#### Conclusions

The research project adopted a single case study approach using multiple qualitative methods for data generation and analysis. Case study research has the advantage of investigating issues that are embedded within a specific real-life context. This approach was found useful, as the research project sought to understand the phenomenon of service innovation that was embedded within the context-specific setting of a business services firm. The qualitative multiple methods used under the case study design supported the generation of data from a range of sources and from multiple perspectives which allowed for rich and in-depth data. The longitudinal case study investigation (18 months) was conducted from "inside" the small business services firm by one of the authors of this SAGE case study as an embedded researcher, allowed for the entire innovation process from the start to the launch of the new service to be studied. The case study approach allowed seeing how issues developed, how participants' perspectives evolved, what were the current practices, and how the new practices changed and become established. The focus was to construct a holistic picture by

identifying different aspects of complexity and issues that were embedded in the organizational context. Then, trying to make sense of the phenomenon occurring within the organization while providing a detailed account of what is happening, drawing on evidence from multiple sources.

The case study research generated useful data, and it is a recommended approach for research in other organizational settings. In particular, the case study research approach provided a detailed understanding of the innovation processes and their organization and management. Generally, case study research has become a predominant methodology used by researchers, and increasingly, other researchers call for more research using a case study approach. One reason to explain this is that often organizational problems, or issues, are context-bound; therefore, a case study design can support the investigation and provide insight that is valuable to both theory and practice.



## **Section Summary**

- Case studies are difficult research designs to undertake but generate useful data and evidence.
- Most organizational problems are context-bound, and case study design can be a valuable approach to investigation.
- Work-based research projects may be particularly suited to qualitative case study design.



#### **Classroom Discussion Questions**

- 1. What are the benefits of the case study research design?
- 2. What are the challenges of the case study research design?
- 3. Why would case study design appeal to you for your research project?
- 4. What would your research questions look like if you were to adopt a case study research design?

Multiple Choice Quiz Questions ————
1. What should drive the choice of a case study research design
a. The phenomenon in its context
Correct Answer
Feedback: Well done, correct answer.
<b>b.</b> The methods
Incorrect Answer  Feedback: This is not the correct answer. The correct answer is A.
c. Researcher's personal preferences
Incorrect Answer

Feedback: This is not the correct answer. The correct answer is A.
2. Which of the following are key methods used in a case study research design?
a. Survey
Incorrect Answer  Feedback: This is not the correct answer. The correct answer is B.
<b>b.</b> Multiple methods of data collection and analysis
Correct Answer  Feedback: Well done, correct answer.

c. Semi-structured interview
Incorrect Answer  Feedback: This is not the correct answer. The correct answer is B.
3. Which of the following are essential features of case study research design?
a. A study of a phenomenon happened in the past
Incorrect Answer  Feedback: This is not the correct answer. The correct answer is C.
<b>b.</b> A study of a phenomenon happened in the past within a real-life context

## **Incorrect Answer**

Feedback: This is not the correct answer. The correct answer

is C.

**c.** A study of a contemporary phenomenon within a specific real-life context

## **Correct Answer**

Feedback: Well done, correct answer.

## **Further Reading**

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