

What Is a Case Study?

Malin Karlsson

*Academy of Business, Engineering and Science,
Halmstad University, Halmstad, Halland, Sweden*

Abstract

Purpose - The purpose of this paper is to answer the question "what is a case study?" by identifying the factors that should be included or excluded in a general definition of the case study.

Design/method - This paper is a literature review which is based on secondary resources in the form of scientific papers and books written on the subject case studies. The literature was mainly collected by searching in the databases Web of Science and Scopus. Some information was also found in books written by influential authors in the field.

Findings - According to this paper, the mandatory features of the case study are that it should intensively investigate a real-life situation consisting of one or a few cases which should be spatially and temporally bounded and thereby context-dependent. In addition to these features the researcher has greater flexibility when it comes to size and time span for cases, the number of cases included in the study, ways of collecting data and ways of building theory from the study.

Originality/value - By identifying the mandatory factors of case study research, as well as clarifying the factors that offer more flexibility for the researcher, this paper provides guidance when choosing case study as research strategy.

Keywords - Case study, Case, Research strategy

Paper type - Literature Review

1. Introduction

Briefly, a case study is a research strategy that helps us understand phenomena in real-life situations and the strategy is common in a wide range of fields, such as psychology, sociology, political science, social work and business (Yin, 2003). The case study is a pretty amazing research strategy since it utilizes naturally existing information sources such as people and interactions between people within the scope of the case (Hyett, Kenny & Dickson-Swift, 2014). Even though case study research has become a popular approach among researchers (Thomas, 2010; Sandelowski, 2011), there are many different opinions of what constitutes a case (Sandelowski, 2011; Ragin, 1992) and furthermore what a case study really is (Gerring, 2004; Elman, Gerring & Mahoney, 2016; Yin, 2003; Ragin, 1992; Gibbert, Ruigrok & Wicki, 2008; Freeman, Baumann, Fisher, Blythe & Akhtar-Danesh, 2012). For that reason, the way researchers use case studies in their research varies which also has resulted in a broad variety in published case studies (Easton, 2010). This variety makes it even more confusing and harder to unravel what a case study is (Hyett et. al., 2014).

The diversity of definitions and understandings of a case study makes it difficult to see the full potential of using the case study as a research strategy (Sandelowski, 2011) and as a result there continues to be "an aura of methodological second best about it" (Thomas, 2010, p. 575). Therefore, the choice not to refer to one's study as a *case study* can simply be based on what the researchers want their study to signal to the readers (Sandelowski, 2011). Consequently, a researcher can avoid naming their study a case study with a

hope of making it more credible from the reader's point of view. Another reason for this arisen aura is the fact that a case study does not offer statistical representiveness (Halinen & Törnroos, 2005), but on the other hand Gerring (2007) argues that "Sometimes, in-depth knowledge of an individual example is more helpful than fleeting knowledge about a larger number of examples" (p. 1).

You could say that all of the above-mentioned statements have created a vicious circle where it is very hard to work out the defining features of the case study. In order to unravel this definitional tangle and to increase the status of case study as a research strategy, it is essential to find a universal definition of the case study. In consequence of the ambiguity surrounding the case study, it has developed a series of subtypes (Ketokivi & Choi, 2014; Levy, 2008; Stake, 1995; Yin, 2003). When constructing a general definition of the case study it has to include the different case study subtypes and it is therefore a necessity to identify the subtypes to make sure not to exclude any of them in the definition. The purpose of this paper is not to create a general definition of the case study, but rather to provide guidance on what should be included and excluded in such a definition according to previous literature.

1.2 Disposition of the paper

The paper starts by clarifying the method of data collection followed by a review of previous literature which focuses on existing definitions of the case study, features of case study research and case study subtypes. Thereafter, previous literature is analyzed by sorting out the defining factors for a case study that are frequently highlighted, and also by obviating the factors that are proved to be misleading. Lastly the concluding arguments of this paper is presented and challenges for future studies are proposed.

2. Method

This paper is a literature review which is based on secondary resources in the form of scientific papers and books written on the subject case studies. I have not tried to comprehensively go through all literature on the subject. Instead I have attempted to select articles and books which are frequently cited and that I have found useful in explaining how a case study should be defined and, at times, how it should not.

The process of selecting relevant literature begun by searching for scientific articles in the databases Web of Science and Scopus. Following words and sentences were used when searching on article titles in the databases: "Case studies", "Definition of a case study", "What is a case study?", "Case study research", "Case study method", "Case study methodology". After having found a fair amount of frequently cited articles I identified several authors whose work obviously have had a great impact on the research of case studies, such as Kathleen M. Eisenhardt, Robert E. Stake, Robert K. Yin, John Gerring, Charles C. Ragin and Howard S. Becker. I collected the most cited work of each of these authors to create a base for this paper. Another strategy I used when collecting resources was that I looked for useful literature in the references of the articles and books that I had already found. This process of literature selection gave me a valuable breadth of frequently cited references to use in my paper.

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3. Review of Previous Literature

3.1 What is a case?

"A case is a single instance; a sample of one", Easton (2010) explains. More exactly a case is a phenomenon which is spatially delimited and that the unit is studied either at one point or over a bounded period of time (Gerring, 2004; Sandelowski, 2011). A case can be of different sizes depending on the object of the case study – for instance it can be a country, a city, a social group, a business, a family or a single individual (Gerring, 2007).

3.2 Definitions and features of case study research

As previously mentioned, opinions are widely divided regarding the definition of a case study. Crowe et. al. (2011) recognizes that there are multiple ways of defining a case study, but what seems to be mutual is that it is an in-depth investigation of a phenomenon in a real-life context. This means that instead of offering statistical representiveness, the case study offers the opportunity to study a phenomenon within its context and thereby develop a deep comprehension of how it relates to its context (Halinen & Törnroos, 2005). According to Hyett et. al (2014), researchers use the case study on account of identifying what is common about that case and what is specific about it, and both Thomas (2011) and Yin (2003) explains that the case study can help us explain *how* or *why* something happened.

What researchers usually mean when they refer to their work as a case study, according to Gerring (2004), is simply that it studies a single phenomenon, occurrence or pattern, but the researcher might also mean: that they are using a qualitative research method such as the small-*N* study, that the research studies something in the field, that the study is a process-tracing study or that the study investigates the characteristics of a single case. Gerring claims that none of these proposals are suitable as a universal definition of the case study. He explains that the most common definition, i. e. studying one single phenomena, occurrence or pattern, is somewhat diffuse since it does not implicate a limitation of the specific phenomena, occurrence or pattern. Furthermore, Gerring claims that the small-*N* study, the field study and the process tracing study are simply different kinds of case studies and are therefore not sufficient as a general definition of the case study. Lastly, he dismisses the equal sign between the case study and a study of only one, which is due to the fact that a sufficient case study usually studies more than one single case. After having dismissed all of the previously mentioned proposals Gerring arrives at a definition of a case study: "an in-depth study of a single unit (a relatively bounded phenomenon) where the scholar's aim is to elucidate features of a larger class of similar phenomena" (2004, p. 342).

In an article, Beverland and Lindgreen (2010) use the following definition of a case study: "an exploration of a 'bounded system' [bounded by time and place] or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context" (p. 57), and in their own definition, Baxter & Jack (2008) agrees on including the fact that a case study is a contextual investigation of a phenomenon. Sandelowski (2011) emphasizes the importance of "...maintaining 'empirical intimacy' with the one or more temporally and spatially defined objects researchers construct and target for study" (p. 158). By empirical intimacy, Sandelowski intends that

the researcher preserves an intensive focus on the case/cases selected for study and she continues by drawing the conclusion that the line where the study can no longer be considered a case study is crossed when that focus becomes impossible to maintain.

Usually, a case study is considered equivalent to a qualitative research method. A case study can be considered qualitative in the sense that it studies a smaller sample of something, but in some ways the case study can also be considered a quantitative or mixed-methods study (Sandelowski, 2011; Elman et. al., 2016; Cousin, 2005; Gibbert & Rurok, 2010; Freeman et. al., 2012; Gerring, 2007). For instance, the quantitative aspect of a case study could be if the researcher investigates the consequence of repeating phenomena. Hence, the most suitable method of data collection for each case study depends upon the aim of the case study (Cousin, 2005; Hyett et. al., 2014). Donnelly and Wiechula (2012) also ascertains that data collection in a case study can be performed in a number of ways.

According to Flyvbjerg (2006) a case study is a context-dependent, in-depth investigation of a single example of a phenomenon. Elman et. al. (2016) agrees with this statement by saying that a case study “focuses intensively on a single case” (p. 375) and the case in focus is supposed to be representative for a larger group of cases, even though they recognize that some case studies are carried out solely for descriptive purposes.

A case study is an empirical investigation of an individual case which is unique and usually addresses a problem of some sort, Harland (2014) explains and continues by drawing the conclusion that one cannot replicate a case study since it is spatially and temporally bounded. However, other researchers point out that case studies do not necessarily have to include one single case, but can also involve multiple cases (Eisenhardt, 1989; Crowe et. al., 2011; Yin, 2003; Eisenhardt & Graebner, 2007). Eisenhardt and Graebner (2007) explains further that a single-case study can help describing an existing phenomenon, while multiple-case studies can be a better ground for building theory from case studies – the phenomenon becomes more generalizable if it occurs in a number of cases. Baxter and Jack (2008) also claims that a single-case study and a multiple-case study are simply two different kinds of case studies. Gerring (2007) proposes a distinction between a *case study* and a *cross-case study*. He states that a case study can include multiple cases but when the number of cases make it impossible to investigate them intensively it should no longer be considered a case study but rather a cross-case study. Gerring (2007) therefore indicates that a defining factor of the case study is that the sample it studies is small – it consists of either one or a few cases.

Cousin (2005), claims that case study research investigates and interprets a scenario in the intention of increasing the apprehension of that specific scenario. In order to do that the researcher has to depict the case in a fully comprehensive manner so that the reader get the feeling of being there (Harland, 2014; Cousin, 2005). Cousin (2005) summarizes the case study as a way of refining the visual perception of the case it scrutinizes.

Siggelkow (2007) points out that a case study can be a persuasive way of motivating or falsifying an argument or a theory and the persuasion lies in the fact that the motivation or falsification comes from a real-life situation. He also According to Siggelkow, the reader will find it easier to see how the argument is applicable to real-life situations if the argument is completed with a practical example. Case study research is also a way of theorizing and inductive theory-

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building is the most common approach for building theory from case studies (Welch, Piekkari, Plakoyiannaki & Paavilainen-Mäntymäki, 2011; Tsang, 2013; Eisenhardt & Graebner, 2007; Ketokivi & Choi, 2014), although other approaches do exist (Ketokivi & Choi, 2014), see below.

3.3 Case Study Subtypes

Several researchers have identified that there are different case study subtypes which focuses on different aspects of the case study (Ketokivi & Choi, 2014; Levy, 2008; Stake, 1995; Yin, 2003). Ketokivi and Choi (2014) addresses three separate methodological approaches for theorizing from case study research:

- *theory generation* – equivalent to inductive theory-building, e. g. studying a phenomenon for which there is no existing theory
- *theory testing* – testing hypotheses deriving from an existing theory
- *theory elaboration* – elaborating and adding detail to the logic behind an existing theory

Levy (2008) has identified four different types of case studies:

- *idiographic case studies* – studies which aim to "describe, explain, interpret, and/or understand a single case" (p. 4), and which are therefore not suitable for generalization to other situations
- *hypothesis-generating case studies* – studies that generate hypotheses which can be theoretically tested with other methods
- *hypothesis testing case studies* – studies which test already developed hypotheses
- *plausibility probes* – studies that are used to illustrate or sharpen an existing theory

Stake (1995) identifies three different subtypes:

- *intrinsic case studies* – studies aiming to understand the particularities of a single case
- *instrumental case studies* – studies that can provide insights and help explaining existing theories
- *collective case studies* – an instrumental study where multiple cases are studied simultaneously to refine an existing theory, although each case is an individual inquiry.

Furthermore, Yin (2003) also distinguishes three types of case studies:

- *exploratory case studies* – studies which "...should be used when the aim is to understand how a phenomenon takes place." (De Massis & Kotlar, 2014, p. 16),
- *descriptive case studies* – studies that illustrate and describe a phenomenon in the context in which it occurred
- *explanatory case studies* – studies that seek to explain causal links between the case and its context in a real-life situation, or as De Massis and Kotlar (2014) puts it, "an explanatory case study should be used when the aim is to understand why a phenomenon takes place" (p. 16).

4. Analysis

The case study research strategy is surrounded by a definitional morass and thus, as shown in the literature review, researchers can mean several different things when referring to their studies as case studies. It is common that a case study is referred to as a study of a single case – that it is a sample of one.

However, a case study must not necessarily include only one case but can also consist of a number of cases, which according to some researchers constitutes a better ground for building theory from case studies. When including multiple cases in a case study it is important to still be able to investigate them intensively. If the number of cases makes it impossible to keep them under intensive investigation, the study should no longer be considered a case study but rather a cross-case study. Regarding the number of cases included in the case study, a defining factor can therefore be that it should be one or a few cases – that the sample should be small. Depending on the aim of a case study, the investigated case (or cases) can be of different sizes - as small as a single individual or as big as an entire country. It is not the size of the case that determines if it is a case study or not. As stated earlier, the determining factor is the possibility to maintain an intensive focus on the case and consequently, when the studied case becomes too large to be able to keep an intensive focus, the study can no longer be considered a case study.

Although a case can be of different sizes, to be called a *case*, the event under investigation must have a determined size. More precisely, the event must have spatial boundaries so that it is clear whether a certain area is included in the case or not. Apart from boundaries in space, the case study must also have temporal boundaries in the sense that the study must have a temporal starting point and an end. In conclusion, it is not sufficient to only say that a case study investigates a phenomenon of some sort. Such statements must also include the necessity of delimiting the phenomenon in both time and space.

Another defining factor for the case study, which differentiates it from several other research methods, are that it studies a real-life situation where the investigated phenomena is dependent on its context. The whole point of a case study is to investigate the links between the case and its context and thereby get a sense of what is common about the case and what is specific about it. In consequence of the context-dependence, a detailed description of the context is required, preferably to the extent that the reader gets a feeling of experiencing the situation firsthand. The fact that the case study is bounded by time and place, and thereby context-dependent, implies that one cannot replicate a case study as a whole. If we redo the case study at another point of time, the context will have changed at least in some extent.

A case study is usually considered a qualitative research method, although a number of researchers claims that data collection in a case study can also include quantitative methods or mixed-methods. As a result, it can be deceptive to categorize the case study as neither qualitative nor quantitative.

Another aspect of the case study is the possibility to build theory from it and the opinions regarding this possibility is divided. Some claim that it is impossible to build theory from a case study since the studied phenomena is dependent on its context and cannot be replicated. Others are more open for the possibility and several different ways of theorizing from case studies are proposed in this paper. Among these proposals are: testing theories, falsifying or motivating theories, generating theories, illustrating/explaining theories and refining theories. As shown in the overview of case study subtypes there are several researchers who have developed different ways to categorize case studies. The majority of the subtypes mentioned in this paper focuses on dividing the case studies into different theorizing approaches as mentioned above. There are also subtypes focusing on whether it is a study of a single case or multiple cases. The remainder of the mentioned subtypes center how the

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case study is performed, more precisely if it is done in an explanatory, exploratory or in a descriptive manner. Obviously there are no unequivocal responses to neither if and how it is possible to theorize from case studies, nor how to categorize them into subtypes. This ambiguity means that the possibility to create a detailed definition of the case study in general is delimited.

5. Conclusion

By studying previous literature discussing case studies, it is obvious that there are various proposals of how to define a case study. This ambiguity has resulted in a flawed reputation for the case study as a research strategy. To enhance the reputation of the case study, it is of great importance that performed case studies demonstrates clear and uniform descriptions of how the studies are carried out. In order to achieve such clarity and uniformity, an unequivocal definition of the case study needs to be formulated. Analysis of previous literature brings out the following recommendations regarding defining factors of the case study, which can help us comprehend what a case study is.

The case study is an investigation of a phenomenon in a real-life situation. The study should intensively investigate a small sample of either one or a few cases and the cases can be of various sizes. The limit for both case-size and number of cases is determined by the possibility to maintain an intensive focus on it or them. In addition, the investigated case or cases should be limited both in time and space so that it is obvious what areas are included in the study as well as when the investigation starts and ends. Lastly, case study research should also be defined by its context-dependence, which in turn means that an adequate description of the context is required in the study.

Obviously, only a few defining factors for the case study as a whole seems to be persistent in previous literature. One could say that these factors are the mandatory features of a case study research. Consequently, when doing a case study, the researcher is offered flexibility and big opportunity to select the type of case study which suits the researcher's specific needs. The flexibility includes possibility to choose when it comes to size and time span for cases, the number of cases included in the study, ways of collecting data and building theory from the study.

5.1 Further research

The flexibility offered by case study research is advantageous in the sense that the researchers can modify the research design so that it fits the aim of a particular study. On the other hand, this flexibility also creates confusion and vagueness regarding the understanding of the concept of case studies. A challenge for the future is therefore to determine whether or not to delimit the flexibility by creating a stricter definition and more explicit guidelines for the case study as a research strategy.

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