

## Chapter 29

# The Contribution of Case Study Research in Information Science

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### ABSTRACT

*The reputation of case study research has grown as a research strategy for developing theories and as a method for investigating and understanding world complex issues. The purpose of this chapter is to demonstrate how the case study research can add value to a research project. Case study research, although becoming increasingly popular is not adequately utilised in information science research. The chapter draws on the literature on case study research in various fields and uses examples to inform research in information science. Case study research have been used across a number of disciplines, particularly, in the social sciences, education and business to address real world problems. Many researchers tend to use case study research because of the numerous advantages it offers. For instance, the employment of multiple data collection instruments maximises the depth of information, which in turn increases transferability of the findings. Additionally, the use of multiple cases and multiple data collection instruments make generalisation easy and valid. Maximising generalisability of findings is the ultimate goal of research.*

### INTRODUCTION

Case study research has undergone substantial methodological development. This evolution has resulted in a pragmatic, flexible research approach capable of providing comprehensive in-depth understanding of a diverse range of issues across a number of disciplines (Harrison, Birks, Franklin & Mills, 2017). Thus, case study designs have been used across a number of disciplines, specifically in the social sciences, education and business to deal with real-world problems. Many researchers tend to use case study research because of the numerous advantages it offers. For instance, case study research can easily be used with other qualitative approaches such as discourse analysis and historical methods in line with

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methodological triangulation (Ngulube, 2015). Case study researchers usually triangulate data as part of their data collection strategy, resulting in a detailed case description (Eisenhardt, 1989; Ridder, 2016; Stake, 2005). The use of triangulation in research makes case study research popular.

The purpose of triangulation is not to arrive at consistencies, as commonly believed (Patton, (2002) quoted in (Ngulube & Ngulube, 2017). In some cases, triangulation may result in inconsistent, contradictory and convergent findings. What is important to note is that inconsistencies may trigger the researcher to explore the phenomenon further in order to make the data sensible. Furthermore, conflicting findings may motivate the researcher to think outside the box (Ngulube & Ngulube, 2017).

Cohen, Manion and Morrison (2007) outline five different types of triangulation:

- Time triangulation employs cross-sectional and longitudinal designs.
- Space triangulation uses comparative or cross-cultural approaches instead of researching one culture.
- Combined levels of triangulation involve more than one level of analysis (individual level, group level and organisational level).
- Theoretical triangulation uses multiple theories to explain research findings.
- Investigator triangulation utilises more than one observer independent of the other.
- Methodological triangulation entails multiple methods.

All these forms of triangulation are possible, for instance, space triangulation which uses comparative or cross-cultural approaches was employed by Cohen, Manion and Morrison (2007) to explore the similarities and differences in student behaviour in the use of four academic libraries in the greater New York City area. However, the most common form is methodological triangulation, which is easily incorporated in case study research. Methodological triangulation can occur if more than two research approaches are used.

However, case study research can mean single or multiple case studies. The use of multiple case studies gives case study research a lot of validity and credibility. This also contributes to its popularity; and, as a result, researchers have confidence in it. It is imperative not to confuse case study research with qualitative research as they can be based on any mix of quantitative and qualitative evidence.

This chapter aims to provide information science researchers and researchers of other disciplines with an account of the benefits of case study research in any given research. Furthermore, the chapter relates a general debate of how different case study research designs contribute to a theory continuum. Hence, the research question: What are the contributions of case study research in information science?

Researchers might not be comfortable with case study research, because it has some level of subjectivity and researcher bias may also be a problem. Furthermore, it is not possible to conduct the research on a large scale because of the in-depth nature of the data. Hence, there are concerns about the reliability, validity and generalisability of the results. However, it is of utmost importance to note that case study research has various advantages in that it presents the data of real-life situations and provides a better understanding of the detailed behaviours of the topics of interest, which cannot be provided by quantitative research. It is necessary to note that case study methods, like all research methods, is more appropriate for some situations than others. It is, therefore, the duty of the researcher to use case study research appropriately to come up with desired results.

Additionally, case study research has its strength in creating theory by expanding constructs and relationships within distinct settings (in single case studies), (Ridder, 2017). On the other hand, case

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