

## Chapter 16

# Understanding a Social Media–Enabled Knowledge Management Adoption Model for Small and Medium Enterprises in South Africa: An Explanatory Sequential Mixed Methods Research Design Study

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### ABSTRACT

*This chapter shares the practical application of the explanatory sequential mixed methods research design in a study to investigate a model for adoption of social media enabled knowledge management for the small and medium enterprises in South Africa. Research that solely applies either the quantitative or qualitative approach presents some weaknesses in understanding a phenomenon holistically. The quantitative approach does not adequately provide depth in contextualising issues to bring more understanding of the phenomenon, and qualitative research is poor in providing repeatability and generalizability of findings. The explanatory sequential mixed methods research has capitalized on the weaknesses of the two approaches by combining them to produce more holistic understanding of the phenomenon. This chapter presents the practical application of the explanatory sequential mixed methods research design to investigate a model of social media-enabled knowledge management adoption for the small and medium enterprises in South Africa.*

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## **INTRODUCTION AND BACKGROUND**

The explanatory sequential mixed methods research design presents a research approach that applies both the quantitative and qualitative research approaches in a sequential manner. It provides researchers with the opportunity to explore the phenomenon holistically by firstly conducting a quantitative study that provides a general understanding of the phenomenon, and then continues with a follow up qualitative study to provide more in-depth explanation of the resultant findings of the quantitative part of the study (Creswell & Creswell, 2017). Methodological choices in research are guided by the particular disciplines that require investigations. The choice of the explanatory sequential mixed methods research is usually made alongside the exploratory sequential mixed methods research, the convergence parallel mixed methods research, and the embedded mixed methods research. The choice is particularly driven by the context and the phenomenon under investigation.

Recurrent issues that are commonly known and require new solutions would be more adequately addressed using sequential mixed methods. Either the exploratory sequential mixed methods design to first explore the phenomenon with a small set of research participants and then build on the findings with the enlarged quantitative study, or the explanatory sequential mixed methods design where a subset of the same participants of the quantitative study are selected in the follow-up qualitative study to explain the findings in more details (Creswell & Creswell, 2017). Other issues require the use of parallel mixed methods designs like the convergence mixed methods design to compare and contrast different results obtained from the concurrent use of qualitative and quantitative studies. The parallel mixed methods designs often produce contradictory results between the quantitative and qualitative enquiries and may require additional datasets to provide more understanding of the phenomenon. As an alternative, the embedded mixed methods designs are used to take the shape of either the parallel or sequential mixed methods designs where the researcher wants to enhance the study by adding more data sets to either the qualitative or quantitative enquiry.

The explanatory sequential mixed methods design was mostly appropriate in this study to investigate a model for the adoption of social media enabled knowledge management (KM) for small and medium enterprises (SMEs) in South Africa. KM involves management procedures and techniques needed to cater for knowledge needs, leverage intellectual capital, and create sustainable competitive advantage within organisations (Abeysekera, 2021). SME organisations in South Africa are privately owned and do not form part of government entities. They use very flexible management approaches to generate and use knowledge for innovation and competitiveness. Their management style is very flexible to adopt informal methods of doing business (Berends et al., 2014). As a result of their less formalized organisational structures, SMEs are flexible to use the technologies that are still under development and not commercialized yet. Rogers (2003) asserts that organisations that are early adopters of technology have a high chance of achieving competitive advantage. Evidently, the flexibility of SMEs allows them to be early adopters of new KM solutions to create knowledge that can be used for innovation and competitiveness (Dong et al., 2017). The application of the explanatory sequential mixed methods design was more suitable to explain the approaches used by SMEs because of the dynamic environments in which SMEs operate.

The first part of the explanatory sequential mixed methods study was to conduct a quantitative study to understand the factors that influence the adoption and use of social media in SMEs for enhancing the KM processes. One of the main advantages of the quantitative phase of the explanatory sequential mixed methods study is the use of theoretical frameworks to provide a framework for conceptualizing the study to avoid presenting results as mere narrations (Ngulube, 2018). The frameworks also assist the

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