



# KMS Infrastructure for KM Practice in Two Mobile Telecommunication Companies in Namibia

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## ABSTRACT

Knowledge management system infrastructure is at the forefront of knowledge management practice. Knowledge must be identified, captured, and shared to improve KM practices; however, little is known about the successful implementation of KMS infrastructure by Namibian mobile telecommunications companies. This mixed-methods research study employed a convergent parallel design and parallel sampling techniques. Three hundred and nine online questionnaires were distributed to a representative sample, with a response rate of 57%. Computer software packages were used to analyse quantitative data quantitatively, and qualitative data from interviews with 11 participants and analysis of documents were analysed thematically. Findings showed that infrastructure, management support, and employee participation were necessary for a successful KMS infrastructure implementation for effective and efficient KM practices. The study provides MT companies with a foundational understanding of how the infrastructure for KMS is essential for effective and efficient KM practice.

## KEYWORDS

Employee Perception, Knowledge Management, Mobile Telecommunication Companies, Namibia, Organisational Knowledge, Senior Management

## INTRODUCTION

In a knowledge-based society, organisations are knowledge-intensive (Ekambaram et al., 2018; Tounkara, 2019; Ullah, 2020). Knowledge management systems (KMS) for knowledge management (KM) are essential for the growth of the global economy and society. Information and organisational knowledge (OK) are critical assets for creating organisational value. Al-Khouri (2014) and Abubakar et al. (2019) suggested that an organisation's competitive advantage and decision-making largely depend on its capacity to manage information and organisational knowledge (OK) effectively. In essence, the knowledge management (KM) approach has emerged as a source of firm heterogeneity that underpins

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competitive advantage, thereby enhancing their performance (Becerra-Fernandez & Sabherwal, 2015; Kianto et al., 2018; Rhem, 2017; Tounkara, 2019; Ngulube, 2019). The organisational KMS method supports a choice of OK systems practicability to drive KM projects from an organisational KMS perspective (Jennex, 2008; Tounkara, 2019). Namibian mobile telecommunications (MT) companies can also benefit from managing their knowledge using KMS infrastructure and contribute to the Namibian economy.

Telecommunications companies can improve their innovation capabilities by investing in KMS infrastructure for effective and efficient KM practices to maintain a long-term competitive advantage. The contribution of the telecommunications industry to socio-economic development is evident in the demand for quality services and products and the ever-increasing number of users. In Namibia, the telecommunications industry is divided into two categories, namely mobile and fixed network operators. Telecom Namibia Mobile (TN Mobile), Mobile Telecommunication Company Limited Company (MTC), and Telecom Namibia Limited (TN) are the dominant telecommunications companies. TN Mobile was established in 2007 as Telecom Namibia's brainchild. MTC was formed in 1995, and Telecom Namibia, the only fixed network operator in Namibia, was formed by an Act of Parliament in 1992. These sectors cover the telecommunication needs of the Namibian population, currently projected at 2.5 million (Namibia Statistic Agency, 2011).

MT companies are systems comprising networks of employees and working groups as the first step to capacity expansion to induce innovation (Al-Mawali & Al-Busaidi, 2022). Thus, employees and departments have the knowledge and should be recognised and managed well for the overall benefit of these organisations. For this reason, it is essential to know where acute OK could be located within the MT companies to be captured, transferred, and stored in the KMS infrastructure to induce innovation for a competitive edge. As TN Mobile and MTC keep adding new services and improving their infrastructure to meet customer demand, KMS becomes essential. MT companies in Namibia opened their operations to a global, competitive technological market making KMS for KM necessary. Their growth, product, and service demands define their success, and they need KM with a focus on KMS infrastructure. . Al-Mawali and Al-Busaidi (2022) noted that in an economy that relies on knowledge, KM is essential in the telecommunications industry and is regarded as a competitive instrument that enables enterprises to stay afloat and prosper.

In today's fast-paced and ever-changing business landscape, effective KM through a KMS infrastructure is crucial for MT companies to bring innovation to their services. Taking note of the increasing number of mobile service users and opening to a high-tech competitive world, understanding the challenges that come with the use of KMS infrastructure to leverage OK to meet customer demand is critical and worth exploring. The success of KMS seems to depend on the infrastructure of these systems, the level of support from senior managers, and how employees perceive this infrastructure. Therefore, this paper aims to investigate these issues in MT companies in Namibia to provide a descriptive understanding of a suitable KMS infrastructure for successful KM practices.

## PROBLEM STATEMENT

In today's fiercely competitive world, MT companies must adopt a knowledge-intensive approach to thrive. The effectiveness of their KMS for KM practices is crucial to determining their success. According to Yuan et al. (2020) and Ullah (2020), the ability to implement organisational KM practices is the primary advantage of having a robust KMS in place. Therefore, MT companies must leverage the potential of their knowledge by using infrastructure, support from senior managers, and employees to induce efficient KMS for KM practices to gain a competitive edge. A well-structured and organised KMS infrastructure catalyses innovation, enhances employee productivity, and provides a competitive advantage to organisations. By leveraging a KMS, MT companies can effectively capture, store, and disseminate OK across the organisation, enabling employees to access critical information and insights in a timely and efficient manner. This, in turn, can lead to faster decision-

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