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Performing a Knowledge Audit Within a South African Chemical Manufacturer:
A Case Study

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ABSTRACT

Despite the increased efforts of organisations to implement knowledge management (KM) initiatives, many fail. Performing a knowledge audit before embarking on KM activities increases the probability of success. In this interpretive case study, the authors applied a modified version of the knowledge audit methodology developed by Perez-Soltero et al. to a South African (SA) veterinary medicine, fine chemical, and pharmaceutical manufacturer. The authors engaged members of the organisation in focus group sessions and individual interviews to identify knowledge assets related to core processes within the organisation. They used the data from the focus groups and individual interviews to identify and articulate many of the knowledge assets at the core of the organisation's current success. In addition, the process of conducting a knowledge audit and making the steps explicit while adjusting for context, may inform researchers and practitioners in terms of knowledge audit approach.

KEYWORDS

Case Study, Knowledge Assets, Knowledge Audit, Knowledge Audit Process, Knowledge Map

INTRODUCTION

In recent decades, the forces of globalisation and rapid technological innovation have given rise to a knowledge-based economy (Hadad, 2017). As the foundation of industrialised economies shifted from physical resources to intellectual assets, knowledge became the new competitive advantage for organisations (Omotayo, 2015). Executives recognise that the knowledge possessed by their employees is the most important strategic resource in their organisations, but concede that the way to manage this resource remains unclear (Evans et al., 2015). While knowledge is increasingly viewed as an asset or commodity, it is still radically different from traditional commodities due to paradoxical attributes. For example, knowledge is not depleted when used or lost when transferred (Dalkir, 2013). Furthermore, knowledge is plentiful, but the ability to use it is scarce and much of an organisation's valuable knowledge walks out the door at the end of the day (Dalkir, 2013; Liebowitz & Beckman, 2020).

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The field of KM has garnered substantial interest since it came to prominence in the mid-1990s (Chaffey & Wood, 2005) and the significance of KM is no longer limited to knowledge-intensive organisations in high-tech industries (Cormican et al., 2021). According to Harvey et al. (2021), the physical products and services an organisation provides are only the tangible results of the knowledge contained within the organisation's intangible assets. Consequently, a more deliberate and systematised approach to developing and sharing an organisation's knowledge is needed (Dalkir, 2013; Nakash & Bouhnik, 2021).

Despite the increasing efforts of organisations to implement KM initiatives, many fail to achieve the desired results. Scholars cite poorly scoped KM initiatives, unclear objectives, poor communication among stakeholders and lack of measurable benefits definition as pitfalls (Firestone & McElroy, 2012). Lee et al. (2021) argued that the pitfalls can be minimised or entirely avoided by performing a knowledge audit before KM implementation.

Chaffey and Wood (2005) define a knowledge audit as "a systematic process of identifying knowledge assets and their relationship across an organisation." (p. 233) Knowledge audits therefore help organisations determine what knowledge they currently have, how they utilise knowledge, and what knowledge they will need in the future (Yue, 2012). Perez-Soltero et al. (2007) noted that many reputable consulting enterprises own proprietary knowledge audit methodologies. However, there is an apparent lack of knowledge audit methodologies in the scientific literature. Despite the lack of published accounts that precisely detail how to execute a standard KM audit, it is possible to extract sufficient insight from existing literature to develop a basis for the creation of a customised KM audit methodology for a specific enterprise (Cormican et al., 2021; Malekolkalami & Sharif, 2022).

This study aimed to perform a knowledge audit within a South African veterinary medicine, fine chemical, and pharmaceutical manufacturer. The knowledge audit aimed to identify and map some of the vital knowledge assets that contribute to the organisation's success focusing on the question: "How can a knowledge audit be executed in a South African veterinary medicine, fine chemical, and pharmaceutical manufacturer?" The objectives and scope of the study were two-fold. First, the knowledge audit would provide a solid foundation should the organisation choose to develop and implement a formal KM strategy in the future. Second, a knowledge audit methodology, based on the work of Perez-Soltero et al. (2007), would be adapted to the unique context of the organisation.

The rest of the paper is structured as follows: Section 2 provides an overview of KM and KM audit-related literature, Section 3 details the theoretical framework and Section 4 presents the research approach and data collection. Section 5 presents the results and Section 6 includes a discussion. Section 7 concludes the paper.

LITERATURE OVERVIEW

Data, Information, and Knowledge

Data refers to "raw images, numbers, words, sounds, etc., which result from observation or measurement" whereas "raw" implies that the data have no inherent structure (Hislop, 2005, p. 16). A set of data by itself does not stipulate its own relevance or importance. According to Nonaka and Takeuchi (1995), information "provides a new point of view for interpreting events or objects, which makes visible previously invisible meanings or sheds light on unexpected connections." (p. 57) Thus, one creates information by interpreting the meaning of data within a specific context. Armbrust et al. (2021) stated that knowledge "is the value added to information by people who have the experience and acumen to understand its real potential." The definitions above support the conventional view that a hierarchical structure exists between data, information, and knowledge (Oltmann et al., 2021).

Polanyi (1966) first distinguished between two kinds of knowledge that are now widely accepted: tacit and explicit knowledge. Explicit knowledge consists of knowledge captured in a tangible form or concrete media. In contrast, tacit knowledge is more difficult to put into words, text, or drawings