


# Human resource management as a facilitator of a knowledge-driven organisational culture and structure for the reduction of tacit knowledge loss in South African state-owned enterprises

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**Background:** Many state-owned enterprises (SOEs) in South Africa face the serious problem of knowledge-unfriendly organisational cultures, structures and human resource management (HRM) practices that hinder the reduction of the risks associated with tacit knowledge loss.

**Objective:** The article examines the role of HRM in facilitating knowledge-driven organisational cultures and structures for the reduction of tacit knowledge loss in South African SOEs.

**Methods:** The study deployed an exploratory sequential mixed methods research design to examine the role of HRM in facilitating organisational cultures and structures that are supportive of knowledge management (KM). In the qualitative phase, data were collected through interviews with 20 purposively selected HR managers in nine SOEs. In the quantitative phase, a questionnaire was distributed to 585 randomly selected employees in three state-owned companies. The instrument was considered reliable with a Cronbach's alpha of 0.94 and a response rate of 25%.

**Results:** The research findings revealed that a majority of organisational cultures and structures in SOEs did not facilitate or assist to propel and support KM activities, behaviours and practices. On a positive note, human resource managers acknowledged that they have a crucial role to play in influencing culture management and structural designs in their companies to boost KM activities, behaviours and cultures.

**Conclusion:** Numerous SOEs did not exhibit certain knowledge-driven behaviours and cultures because of a lack of structures to drive KM. Human resource managers did not exert their role in driving and influencing such knowledge-based behaviours, cultures and structures to lessen potential tacit knowledge loss.

**Keywords:** knowledge management; organisational culture; organisational structure; knowledge loss; human resource management; state-owned enterprises; South Africa.

## Introduction and background

The resource-based view (RBV) and knowledge-based view (KBV) theories of the firm highlight a need for knowledge-intensive organisations to invest in the development of organisational capabilities such as culture, systems, processes and structures to safeguard their firm-specific human and knowledge capital assets. Investment in such organisational capabilities will ensure that knowledge capital assets as drivers for competitive advantage are protected for the superior performance and sustainable future of these companies. State-owned enterprises (SOEs) are business entities of the state that are established and regulated according to relevant pieces of legislation of the country. According to Sultan Balbuena (2014:9), SOEs can be either partially or wholly owned by the government. Fourie (2014:30) observes that at the regional, national and international levels, SOEs are key drivers of economic growth and development in both developing and developed economies. As such, they remain key players in the global economy. Globally, many countries use state-owned entities to drive knowledge-based competition, economy and innovation systems (Benassi & Landoni 2019). Moreover, SOEs are also knowledge-intensive, creating entities in addition to being knowledge explorer agents. Despite this, Phaladi (2021) observed that many SOEs are lagging behind in a number of areas such as a knowledge-driven culture; functional roles and structures; human resource management (HRM) processes and leadership practices support for effective knowledge management (KM) and the reduction of tacit knowledge loss. The reduction of tacit knowledge loss in the context of the study refers to efforts

that are aimed at mitigating or reducing the risks associated with the loss of tacit knowledge.

In South Africa, SOEs are considered key instruments to drive the economic transformation agenda, job creation and improve the socio-economic conditions of the country. However, many South African SOEs face a phenomenon of tacit knowledge loss caused largely by human resource attrition factors and a lack of knowledge-driven HRM practices and knowledge-unfriendly organisational cultures and structures (Phaladi 2021; Phaladi & Ngulube 2022). Both the RBV and KBV of the firm call for the protection of the firm-specific human resources and knowledge resources through investments in relevant human resource and KM practices (Wright, Dunford & Snell 2001). Nonetheless, several studies equally caution that companies need to pay attention to the organisational cultural fabric and structural configurations to ensure a greater protection of their valuable knowledge assets (Gürlek 2020; Gürlek & Tuna 2018).

Dessler (2015:36) defined HRM as the management philosophy of selecting, recruiting, developing, appraising and compensating firm-specific human resources and attending to their employees' relations, health and safety and fairness concerns. A theory on knowledge stickiness as advanced by Szulanski (2000) in KM literature argues that unless organisations invest in removing barriers for effective knowledge transfer and retention, knowledge leaks associated with talent attrition will continue to cause havoc and threaten the sustainability of their businesses. Knowledge stickiness refers to the difficulties inherent in the tacit knowledge transfer process (Szulanski 2000). Simplistically put, stickiness in the knowledge transfer process implies that tacit knowledge is not such an easy thing to share from one human being to another. Durst and Zieba (2020) and Phaladi (2022) postulated that losing critical firm-specific knowledge capital assets at the wrong time could impact negatively on the competitiveness, productivity and innovation capacity of the affected business entities. It is for this reason that organisational culture and structural configurations have become such important considerations in the literature in order to deal with issues pertaining to human capital loss. It is within this spirit that KM researchers and practitioners call for HR departments and their relevant practices to drive and invest in knowledge-driven organisational cultures and structures for effective KM strategies.

Organisational culture is considered a sociocentric approach for the effective management of tacit knowledge. Matošková and Směšná (2017) characterise organisational culture as a system of beliefs, norms and values that are shared by firm-specific human resources. In other words, organisational culture comprises critical nonphysical infrastructural support for effective KM. Gürlek and Tuna (2018) posited that the organisational culture assists in guiding and shaping the expected actions and behaviours of the organisational members. Similarly, organisational structures fall within that category of nonphysical infrastructural support because the

structural configuration of the firm could make or break KM initiatives. Both organisational culture and structures are considered important drivers for ensuring the success of KM and innovation in business enterprises. However, locally in South Africa, there are inadequate empirical studies examining the role of HRM practices in facilitating and shaping the desired knowledge-centric culture and structures to minimise the impact of tacit knowledge loss in SOEs (Phaladi 2021). Phaladi (2021) observed that organisational cultures and structures within SOEs hindered knowledge transfer and retention efforts. As such, SOEs remain vulnerable to the risks associated with tacit knowledge loss. It is in this regard that Phaladi and Ngulube (2022) cautions South African SOEs on the need to explore several mechanisms for ensuring that knowledge transfer and retention take place to enhance KM capacities and reduce tacit knowledge loss.

## Problem statement

Extant literature on KM observes that HRM departments and their practices fail to appreciate their critical role in the development and facilitation of knowledge-driven behaviours, cultures, processes, systems and structures in business enterprises (Dalkir 2020; Hislop 2013; Phaladi 2021). Tacit knowledge loss risks are common challenges in many SOEs (Phaladi 2021, 2022). However, many HRM departments in South African SOEs are lagging behind in practices to facilitate and shape the requisite knowledge-driven cultures and structures (Phaladi & Ngulube 2022). In a nutshell, HRM practices largely fail to guide and shape the desired knowledge-driven activities and behaviours. Organisational culture and structure assist in shaping and guiding certain actions and behaviours of staff members in a business entity. Nevertheless, several studies point out that organisational cultural and structural issues pose serious challenges for effective knowledge transfer and retention in many organisations (Gürlek 2020). Despite several studies asserting the fact that the features of organisational culture and structure influence KM (Islam, Jasimuddin & Hasan 2015), HRM has been lamented for not playing an effective role in facilitating knowledge-driven organisational cultures and structures. Phaladi (2021:90) observed that SOEs in South Africa are no exception to this trend. State-owned entities need to pay particular attention to their HRM practices, their organisational cultural fabric and structures in order to arrest the challenges associated with tacit knowledge loss, as well as to maintain their superior business performance and sustainability. Given the fact that there are many state-owned companies in South Africa that are critical instruments in building the economy and for positioning the country as a developmental state in a global knowledge-based competition, the lack of knowledge-driven cultures and structures threaten their developmental mandate and survival. A culture of knowledge transfer and retention does not exist in a vacuum, as KM practices are part of the broader firm-specific culture. Ayatollah and Zeraatkar (2019) similarly observed that the effective

management of organisational tacit knowledge is largely dependent on organisational structure and design.

## Objectives of the study

The purpose of this research project was to examine how organisational culture and structures in South African SOEs helped to facilitate the effective management of tacit knowledge loss. Furthermore, the study also sought to examine the role of HRM in moulding a knowledge-driven culture and structures to reduce the risks which are inherent in tacit knowledge loss from both HRM and KM perspectives. The objectives of the study were to:

- examine the role of HRM in facilitating a knowledge-driven culture and structures for the reduction of knowledge loss in SOEs
- establish whether organisational culture supports KM for the reduction of tacit knowledge loss in SOEs
- establish whether organisational structures support tacit KM in SOEs
- propose strategies for HRM to facilitate knowledge-driven behaviours, culture, systems and structures for the reduction of tacit knowledge loss.

## Literature review

In a knowledge-based competitive economy, human resources, KM, organisational culture and structure remain critical factors in ensuring businesses' sustainable competitive advantage across various market sectors. The study relied on different theories and constructs that are important for the effective management of tacit knowledge in SOEs. Both the RBV and KBV theories of the firm argue that the effective management of organisational knowledge is largely dependent on the interaction amongst firm-specific human resources and organisational interactions with its business environment (Barney, Wright & Ketchen 2001). The RBV on organisational human resources as sources of superior performance and sustainability places a greater value on its suitable management systems (Gürlek 2020). It is for this reason that HRM is best suited to ensure that mission-critical employees are retained. Similarly, KBV theory is more specific in terms of placing a strategic value proposition on firm-specific knowledge resources to ensure effective organisational management and sustainability. Equally so, KBV theorists view firm-specific culture and structures as important constructs and organisational capabilities that enable effective management of tacit knowledge thereof, within firms (Degn-Andersen 2021), albeit a lack of empirical studies linking the role of HRM in supporting KM and in facilitating knowledge-centric organisational culture and structural designs (Dalkir 2020). It is in this context that organisational culture and structure are considered firm-specific resources that are critical for the management of organisational knowledge and human resources; hence, these concepts are important constructs of the study. This implies that organisational culture and structure become important considerations in KM, and HRM plays a facilitating role on these variables for effective transfer and retention of tacit

knowledge in organisations. Organisational culture could positively or negatively influence and guide KM strategies and processes (Klepić & Madžar 2017). Rezaei, Jafari-Sadeghi and Bresciani (2020) asserted that the success of KM in firms often requires changes to their culture and structures. Several of the barriers to effective KM therefore occur within organisational cultural and structural contexts (Phaladi 2021). Extant literature (Barney et al. 2001) posited that the culture of an organisation remains an organisational-specific resource. Therefore, in order to enhance the opportunities for effective KM practices, companies need to pay attention to their firm-specific cultures. According to Rezaei et al. (2020:487), for the effective management of organisational knowledge to happen, companies need to work and build the kind of desired culture and atmosphere that encourages and enhances communication and interactions amongst firm-specific human resources. Organisational culture is defined by Gürlek (2020) as a critical nonphysical infrastructure that affords firms a sustainable competitive advantage.

The proponents of the RBV theory, such as Barney et al. (2001), cautioned that firms that invest in building unique and imperfectly imitable organisational capabilities and resources perform better than their competitors. Organisational culture is one such organisational capability and resource that knowledge-based organisations need to invest more energies into if they are serious about the effective management and reduction of tacit knowledge loss. Several researchers (Gürlek 2020; Phaladi 2021) in recent years have concurred that a knowledge-driven organisational culture has become a relatively new emerging research area that KM practitioners and organisations need to pay attention to in order to enhance their KM practices. Moreover, there is a common understanding that organisational culture impacts KM strategies and practices (Phaladi 2021). Researchers in the KM field concur that strong links exist between organisational culture, organisational structure, KM and HRM (Gürlek & Tuna 2018; Hislop 2013). However, they lament the fact that these four concepts have been researched independently and point out that there are only a few studies examining the relationship between the four concepts, despite evidence that the effective management of organisational tacit knowledge loss hinges much on culture, structure, human resources and technology. Unlike explicit knowledge, tacit knowledge is more difficult to manage and transfer across business units, thus requiring changes in organisational culture, processes, structure, technology and HRM to ensure smooth knowledge sharing and retention.

Similar to organisational culture as discussed in this article, organisational structure also occupies a significant role in coordinating and shaping KM activities, practices and systems in companies. Ayatollah and Zeraatkar (2019) observed that the successful implementation of KM strategies is dependent to a great degree on organisational structure. In other words, organisational structure could serve to coordinate or impede desired knowledge-based behaviours and culture. At an organisational level, structure affects the way jobs, workflows, interactions and reporting lines are

configured. Moreover, hierarchical organisational structures are said to have a negative impact on how staff members frequently interact with each other and therefore how they transfer knowledge (Becerra-Fernandez & Sabherwal 2015). This source argues that flattening the structures of business entities could assist to remove unnecessary organisational layers and silos, which stifle the easy flow and sharing of knowledge and information.

Human resource management is another critical dimension for the successful implementation of a KM culture within organisations. Several studies have alluded to the fact that the effective management of tacit organisational knowledge is largely dependent on people and the management of these human resources (Hislop 2013; Khawaldeh 2020). It is within this context that practices aimed at acquiring, developing and retaining human resources could serve as necessary conditions for successful KM within the firm. The RBV theory of the firm is concerned with how strategic HRM pays attention to the identification, recruitment, capacity development, deployment and retention of firm-specific employees (Wright et al. 2001). In a nutshell, the contribution of HRM to the business's sustainable competitive advantage is through the identification, development and selection of knowledge workers who have the required knowledge and skill sets. Nevertheless, several studies point out that a serious problem facing HRM departments in the current knowledge-based economy is in finding, recruiting and deploying knowledge workers with such knowledge attributes and capabilities (Mariano, Casey & Olivera 2020). The inability to retain knowledge workers threatens the sustainability of business enterprises (Durst & Zieba 2020). Phaladi and Ngulube (2022) assert that SOEs in South Africa are facing the worst case of this scenario. Phaladi's (2021) study critiques the HRM departments within SOEs for not playing their critical role in KM and not facilitating a knowledge-oriented organisational culture and structures. Within organisations, HRM occupies the role of human capital custodianship by fostering knowledge, skills, abilities and commitments amongst the human resources of the firm (Dalkir 2020). In addition, HRM has a part to show in building and shaping a knowledge-oriented organisational culture within which KM is nurtured and embedded within business processes. Nonaka, Toyama and Nagata (2000:25) added that in order for the company to develop the 'ba' or shared context and culture, business executives and human resource managers must select the right blend of human resources to engage and encourage interaction in KM initiatives. Several researchers (Donate & Guadamillas 2015; Matošková & Směšná 2017) believed that in doing so, HRM within firms builds a KM capability and knowledge-sharing culture. It is evidently clear that HRM has a critical part to play in influencing a knowledge-oriented institutional culture, structures and KM processes in knowledge-based companies. However, it remained unclear whether HRM business units with SOEs play those facilitating roles.

## Methodology

This research project followed a mixed methods research methodology, with exploratory sequential design as the preferred research strategy guiding the execution of the study. The rationale for the application of the mixed methodology was based on the need for the researcher of this study to generate a complete, diverse and balanced picture from different standpoints and lenses, examining the role of HRM in facilitating the desired knowledge-oriented culture and structures to mitigate tacit knowledge loss in South African SOEs. Challenges pertaining to loss of tacit knowledge, institutional culture and structure and HRM are complex research phenomena (Phaladi & Ngulube 2022) which could not have been researched independently of each other, largely because they are intertwined and interdisciplinary. Ngulube (2019) opined that mixed methods research is well suited for researching complex problems from multiple standpoints.

The exploratory sequential mixed methods research design unfolded in two phases, namely the qualitative phase in the first strand and the quantitative component in the second strand (Phaladi 2021). In the qualitative strand, the researcher explored the problem qualitatively through interviews with 20 purposively selected human resource managers in nine South African SOEs. Creswell and Plano Clark (2018:188) posited that the sample size for the qualitative strand in a mixed methods project is often smaller than in the quantitative component. The sample size of 20 human resource managers was deemed enough for the qualitative strand for the purpose of gathering and formulating knowledge on the phenomenon. Creswell (2014) affirmed that fewer cases or participants, ranging from 1 to 40, are sufficient in the qualitative studies for the researcher to develop a rich picture of the research problem. ATLAS.ti software was used to code data in the qualitative component. Thematic analysis was applied as the data analysis strategy for qualitative interview data. In the second (quantitative) strand, data were collected through a survey questionnaire distributed to 585 randomly chosen employees in three SOEs. The instrument used for the collection of statistical data was considered reliable, with a Cronbach's alpha of 0.94. A response rate of 25% was received for the quantitative component and was considered sufficient for the exploratory factor analysis. Statistical Analysis Software (SAS) was deployed to analyse quantitative data gathered from the survey instrument. Hair et al. (2014) contended that a response rate of 120 or more is sufficient for studies that use exploratory factor analysis. The rationale behind the use of exploratory factor analysis in the quantitative phase was to establish correlation co-efficiencies of variables that were important for the study.

## Presentation of research findings

Bearing in mind that this project is an exploratory sequential mixed methods research design, the research results are

presented in two parts, starting with the exposition of research results from the qualitative phase collected through the interviews, followed by the statistical research results.

## Qualitative research findings

### The role of human resource management in supporting knowledge management through organisational culture

In order to answer the study objective on organisational culture support in KM, this section presents answers to the research questions obtained from the 20 purposively selected human resource managers in SOEs: what would they consider the role of the HR department to be in nurturing a knowledge-centric business culture?

Whilst KM was not formally adopted in more than 60% of the SOEs, most human resource managers interviewed revealed that HR departments have a part to play in developing and shaping knowledge-oriented organisations and cultures in their respective state-owned entities. This is irrespective of whether their organisations have formalised KM processes and roles in their structures. Overall, all participants, regardless of whether their organisations have KM units in their structures or not, agreed on their perceived task as the enablers and drivers of a knowledge-centric culture in an ideal situation. Their views in terms of their role in building and facilitating a knowledge-based business culture are expressed and summarised as follows:

- through building organisational commitments and engagements by actively communicating and shaping the cultural visions and narratives of their entities
- by ensuring that HRM practices and activities are in sync with the KM vision and strategies of their companies
- ensuring that HRM departments serve as champions for KM practices, norms and values
- by creating and facilitating enabling systems, structures, roles and job profiles dedicated to the effective management of organisational knowledge
- making sure that key performance metrics on KM are embedded in performance management systems
- suggesting reward systems that encourage and incentivise knowledge-driven activities and behaviours
- facilitating the elimination of silos in state-owned companies
- forging strategic relationships with KM units
- assisting in the establishment of KM units within the structures of their organisations.

It is important to note that all the roles identified above are part of the ideal and are carried out by only a few HR managers (33%), where KM units and roles are formally established within their businesses.

Pertaining to the research question on whether organisational culture supports KM in the SOEs, a majority (60%) of the HR managers concurred that the culture of their companies did boost KM initiatives. Moreover, this observation was irrespective of whether or not their SOEs had KM structures.

It must be observed that those with KM units in their companies were part of the majority. However, there were instances whereby SOEs supported KM in principle, even though they lacked KM structures, functions, practices and systems to make it happen deliberately.

Another important related study question was how the HRM department helps create and support a knowledge-driven company culture for KM initiatives. Consistent with the findings of the main study wherein 67% of the HR managers did not have KM formalised in their structures and systems, only 33% of the HR managers indicated that KM has been adopted as part of organisational life. It is for this reason that this minority of participants expressed a number of initiatives to illustrate how their SOEs' cultures support KM activities and strategies, namely:

- investment in human capital development opportunities, for example, training opportunities, workshops, staff bursaries and bursaries for the dependants of staff
- formalised systems, roles and practices to support KM
- facilitating a knowledge-centric organisational culture through an organisational learning culture
- availing budgets dedicated to KM initiatives, processes and systems
- succession-planning activities to embed knowledge-based behaviours and activities
- top management and leadership buy-in for KM initiatives
- job rotation initiatives
- on-the-job shadowing initiatives
- reward systems to incentivise the desired KM behaviour and culture.

It is a noteworthy observation that even those participants who indicated that their organisational cultures were not supportive of KM posited that their organisations were putting some serious investment into human capital training and development programmes. For example, one interviewee expressed the following:

'We are giving people opportunities to go and present their stuff; we encourage staff members to have meetings, monthly meetings and quarterly meetings, as HR, and we need to be facilitating that so that there is knowledge sharing.' (Interviewee #9, Gender: Male, HR Manager, SOE#2, 2019)

Without a doubt, the above-mentioned extract also implies that this state-owned entity has some knowledge-sharing initiatives and culture, even though such KM processes did not occur under the label of KM per se. However, an organisational culture that was supportive of KM was nonexistent in many of the SOEs under study. In some cases, a few KM activities were taking place at the head offices of some but were lacking at the branch or site level. In a nutshell, articulating one cultural vision of the organisation across all its branches was a challenge in this state-owned company. Its role in supporting KM seemed only limited to training and development activities.

### The role of human resource management in supporting knowledge management through the organisational structure

Organisational structure remains a critical factor for the effective management of organisational knowledge. This section examines the institutional structure and the job of HRM in facilitating KM practices and behaviours. The majority of participants perceived hierarchical structures as impediments to knowledge transfer and protection in their business entities. Thirteen interviewees in seven of the SOEs revealed that their structures were hierarchical, and seven interviewees in the remaining two entities indicated that their structures were flat. There were conflicting feelings regarding the efficiency of either flat or hierarchical structures in facilitating KM activities and behaviours. A case in point is that a company may have a structure that appears hierarchical and divisional but that may have a KM champion in every division in addition to the dedicated KM unit. This was the case in one of the state-owned companies. Clearly, one could agree with such feelings and claim that although the structure appeared hierarchical, it facilitates KM behaviour and practices, as these behaviours and practices are entrenched in the organisational structure. A majority of the interviewees posited that a flat structure could present an extra benefit in terms of the ease of flow and transfer of knowledge. Nonetheless, staff hit their ceilings too fast and as such, this creates a challenge in terms of prospects for furthering career growth. One participant in SOE2 captured the feeling as follows:

'We have a very knowledge-based organisation, number one. However, the way it is structured, is it efficiently structured? Optimally structured? No, it is a flat – a very flat structure; it is extremely flat, and those are some of the issues that causes retention problems. People hit the ceiling very fast. If I have hit the ceiling and I do not want to be the head, so what?.'

(Participant #9, Gender: Male, HR Manager, SOE#2, 2019)

It remains untested as to whether flat or hierarchical structures inhibit KM activities and behaviours in these state-owned entities. However, it remains indisputable that the HR divisions across all the SOEs of the study did provide resources and infrastructure to support training and capacity development opportunities. Such opportunities indeed facilitate knowledge acquisition, application and development. Whether that implies KM or some aspects of it remains to be understood. However, training and development opportunities provided by SOEs to their employees play an important role as they facilitate and drive the acquisition and development of organisational knowledge. The participants across the board indicated that HR managers should indeed be occupying an important role in enabling and designing structures that are supportive of KM processes such as acquisition, applications, sharing and retention. It is in this context that the HR managers in SOEs where KM was not institutionalised acknowledged their failures on their part and that of executive management for not having KM roles articulated in their institutional structures. Moreover, KM was not institutionalised in 67% of the state-owned entities under study. The results showed that

this was highlighted as a challenge by the majority of participants. Structures in many state-owned companies did not support KM.

### Quantitative research findings

This part of the findings presents a statistical analysis of the 145 respondents from the quantitative component of the project. The responses were randomly collected by a survey questionnaire in three South African SOEs. The responses were obtained from 145 employees, including KM practitioners working in the SOEs sector.

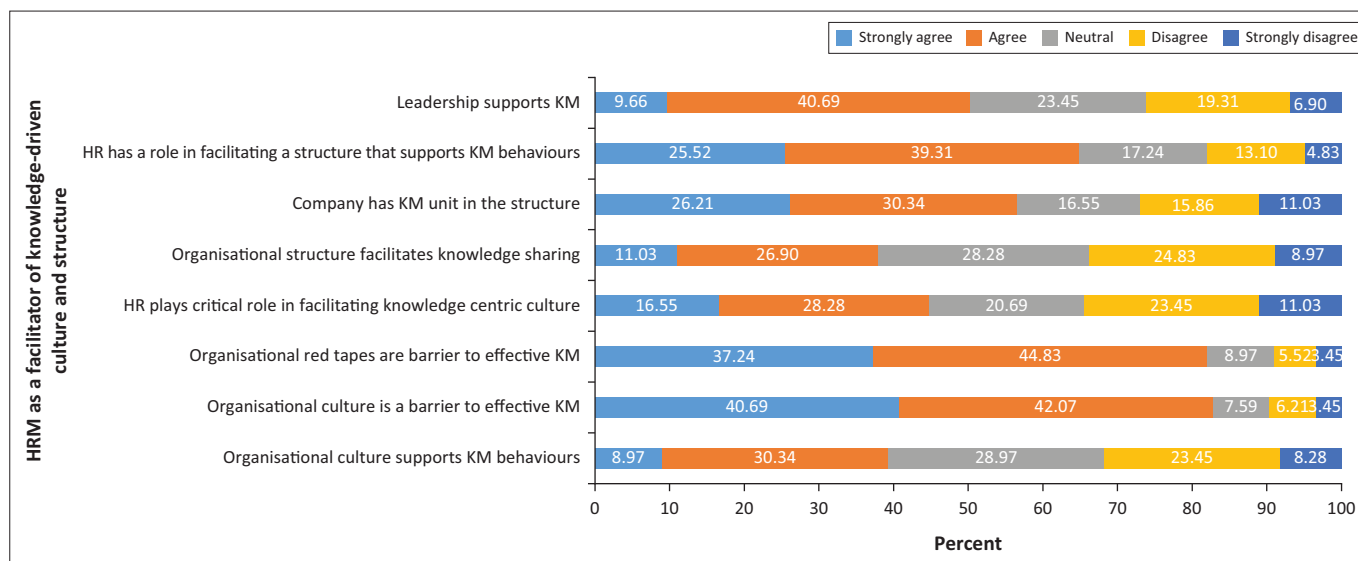
#### The role of organisational culture, structure and human resource management in knowledge management

The responses on the role of organisational culture, structure and HRM in supporting the desired KM behaviours differed from one variable to another. Figure 1 provides a diagrammatic representation of the statistical responses. The majority of respondents (39%) revealed that organisational cultures within SOEs support KM activities and behaviour. In contrast, the minority (32%) of respondents showed that organisational culture did not enable KM behaviours and initiatives. Interestingly, a minor but noticeable share of respondents (29%) were neutral about the variable.

From the quantitative data collected, organisational culture has proven to be a major obstacle for the effective management of tacit knowledge, because a majority (83%) of the respondents declared this finding in their responses. Only 10% of the respondents provided answers to the contrary, whilst 7% remained neutral about this variable. Equally, a significant portion (82%) of respondents indicated that institutional red tape was a serious impediment to the effective management of organisational tacit knowledge.

Regarding the statement, 'the organisational HRM department plays a critical role in facilitating a knowledge-oriented business culture', a majority (45%) of respondents believed that the Human Resource department played an important role in this regard, whilst a noticeable minority (34%) answered to the contrary. Another minor but noticeable portion (21%) of respondents were less informed about whether their HRM department occupied a central role in shaping a knowledge-driven culture and behaviour. Concerning the statement, 'organisational culture facilitates knowledge sharing', the majority (38%) of respondents revealed that this did apply in their SOEs, denoting that their institutional structure facilitated knowledge transfer, whilst 34% answered to the contrary. A small but visible portion (28%) of respondents did not know if the statement was applicable to their companies.

When it came to the research question on 'whether the state-owned enterprise has a KM department', many (56%) of the respondents revealed that this was indeed the case in their organisations, whilst a small number (27%) stated that their entities did not have a KM unit. Only 17% of the respondents were less informed on whether their organisations had a unit



Source: Phaladi, M.P., 2021, 'Framework for integrating knowledge management and human resource management for the reduction of organisational knowledge loss in selected South African state-owned enterprises', PhD thesis, University of South Africa  
KM, knowledge management.

FIGURE 1: Organisational culture and structure support of knowledge management.

within its structure dedicated to KM. In relation to the variable that 'the HR department had a role to play in enabling structure that boosts KM behaviours', a substantial portion (65%) of respondents affirmed the statement, whilst 18% answered the opposite and 17% were neutral. Pertaining to leadership support of KM, the majority (50%) of respondents attested that there was such support, whilst 26% demonstrated that the absence of leadership support was a challenge, and a small percentage (24%) were less informed about the variable.

## Discussion of the research findings

### The role of human resource in facilitating a knowledge management culture

Based on the findings of the research, the role of organisational culture in KM and the HR facilitation of a knowledge-driven culture remains undisputable. Organisational culture could constructively (or unconstructively) affect KM in a business enterprise. It drives, facilitates, shapes and enables KM. Gürlek (2020:48) averred that a business culture that enables and shapes KM behaviour is labelled a 'knowledge-oriented' organisational culture. Furthermore, such a culture should involve the influencing and moulding of certain values, beliefs and systems that serve the best interests of KM strategies and activities. The research findings of the qualitative phase revealed a need for HRM departments and their processes to be at the centre of shaping and facilitating the process of developing an institutional knowledge-based centric culture within the SOEs. Institutional culture was a serious challenge in many SOEs of the study. A lack of organisational culture that was supportive of knowledge transfer and the retention of tacit knowledge served to increase knowledge stickiness and loss in many SOEs. According to the researcher of this study, this research finding was reinforced both qualitatively and quantitatively by empirical evidence. Several human resource managers

indicated that their institutional culture did not advance KM activities and processes because of a lack of KM strategies, practices and structures. However, this research project found that companies may show specific knowledge-centric behaviours even though KM is not institutionalised through roles and structures. Several participants in the qualitative phase who revealed that their business culture enables, influences and sustains KM were from three SOEs with formalised structures and roles dedicated to KM. Nevertheless, there were certain instances where, in principle, SOEs did support KM even though they were lacking structures and systems to encourage this management philosophy deliberately and practically. It is interesting to note that a significant number of knowledge-related initiatives in some SOEs occurred without labelling such activities as KM. Nonetheless, this did not mean that these SOEs did not show knowledge-centric behaviours and cultures. For example, there were state-owned entities that invested in capacity development and learning initiatives for their staff to acquire, grow and learn new knowledge and skill sets. Therefore, it cannot be claimed that they did not show specific knowledge-centric behaviours and cultures.

In the qualitative strand, the HR managers who affirmed that their institutional culture supported KM were in the majority. Interestingly, the statistical research findings revealed a very contrasting picture because several of the participants argued that organisational culture was not supportive of KM behaviours. Moreover, organisational culture proved to be a major stumbling block to the effective management of organisational knowledge and its associated knowledge loss risks. This observation was confirmed by 83% of the respondents in the statistical research component. Furthermore, red tape within the companies was flagged as a serious impediment to successful KM by more than 82 of the respondents. The findings of the research project confirmed the results of several prior research (Islam et al. 2015).

## The role of human resources in facilitating structures to support knowledge management

Like institutional culture, as referred to in the previous section, the structure could also serve to enable or hinder knowledge-centric activities and behaviours. Concerning organisational structure, the study infers that human resource departments have an important role to occupy in facilitating the design of organisational structures that advance KM in their companies. However, the majority of the SOEs were found lacking in terms of structural provisioning for KM. Of the nine SOEs that partook in the qualitative component, 67% were lacking dedicated roles and structures to support KM. It can therefore be inferred that South African SOEs did not embrace KM as a management philosophy, given the fact that KM structures were lacking in the majority of the entities. A lack of organisational structure dedicated to supporting KM was a serious challenge in several SOEs. The research finding confirmed the existing literature in this area. Kianto, Sáenz and Aramburu (2017) deduced that an institutional structure that does not enable the desired knowledge-driven activities, behaviours and strategies cannot claim to be a knowledge-oriented structure if it does not support KM.

Organisational structure is impacted by the configurational designs of the structure, how human resources frequently interact with each other and how they disseminate information and knowledge between themselves (Mueller 2014). This research explains the type of organisational structural configurations that are perceived as knowledge oriented (Hislop 2013). Mueller (2014:192) concludes that the hierarchical structural design of the company unconstructively affects human resources interactions and the sharing of knowledge. Interestingly, the findings of the qualitative component revealed that hierarchical structures were inhibitors of KM processes and behaviours in a majority of the companies. The existing research is in favour of more flexible, matrix-like structures, as they enable knowledge transfer and integration (Matošková & Směšná 2017). The researcher of this study contends that although a flat structure presents an added advantage for the ease of sharing and flow of information and knowledge, on the negative side, the staff reach the ceiling of their career paths in the companies too rapidly. Reaching the end of their career developmental pathways too quickly creates problems in terms of opportunities for further career progression. This may lead staff members to consider employment opportunities elsewhere. In a nutshell, the researcher infers that a matrix or flat structure may indirectly contribute to employee turnover if firm-specific human resources take up job opportunities elsewhere. Employee turnover contributes to, if not fast-tracking, loss of organisational tacit knowledge loss (Phaladi 2022).

## Limitations and suggestions for further research

Like any other research project, this scientific enquiry has several limitations regarding the role of organisational

culture, structure and HRM in facilitating and shaping knowledge-centric cultures and behaviour. The study was undertaken in a restricted number of SOEs in South Africa. Only nine state-owned companies agreed to take part in the qualitative strand and three in the survey component of the study. The qualitative component was subjective in nature, whilst the quantitative phase was limited to only a few SOEs. It is in this regard that future studies on the role of HRM, organisational culture and structure in supporting KM should include SOEs in other market sectors that were not represented in this study. Future quantitative research will benefit by involving more SOEs with bigger population samples. The study was context specific, with a limited number of South African SOEs. Hence, the findings should be used with caution in similar future studies in other countries and sectors. Another limitation was that the quantitative phase was undertaken during the national coronavirus hard lockdown regulations, thus the researcher was hamstrung for follow-ups with the potential respondents. Future similar studies may enjoy a greater response rate in the post-COVID-19 era.

## Conclusion and recommendations

The study concludes that organisational culture and structure serve as both an impediment and enabler for the effective management of tacit knowledge. Insofar as organisational culture is concerned, the researcher concludes that a knowledge-driven organisational culture did not exist in many SOEs. An institutional culture that does not propel, facilitate and entrench KM cannot claim to be a knowledge-driven culture because such a culture only serves to increase knowledge stickiness. Furthermore, HRM departments and managers have a critical role to play in facilitating and shaping the desired knowledge-centric behaviours and cultures. Therefore, there is a need to deliberately and intentionally mould, guide and entrench specific norms, beliefs and behaviours to advance KM behaviours and practices in SOEs. As far as the institutional structure is concerned, the researcher deduces that HR managers and their business units have a central role to play in facilitating structural designs that are accommodative and supportive of the desired knowledge-based practices. Moreover, the study infers that it does not matter whether the organisational structure is flat or hierarchical in nature. Of critical importance is for the structure to demonstrate the desired knowledge-driven behaviours, roles and processes that are committed to advancing a KM philosophy in these organisations. The absence of devoted structures to propel KM undoubtedly indicated that there was no knowledge-centric leadership, both from the HRM and organisational executive leadership levels. In so far as the theory on knowledge stickiness is concerned, the study showed that the absence of a knowledge-oriented culture, leadership, structures and HRM had a negative impact when it comes to transferring and retaining tacit knowledge in the majority of SOEs. Moreover, the researcher recommends that HR departments should play their roles as the custodians of organisational structural designs and people management practices in their



organisations by helping in formulating and enabling knowledge-driven structures and shaping the desired knowledge-based behaviours and culture. The success of KM in organisations is contingent on human resources, organisational culture and structures. The HR role remains undisputable in all these variables for the effective management of organisational tacit knowledge loss. Human resource managers should develop an understanding of KM vocabulary so that they can align their practices towards supporting the KM philosophy. Additionally, HR managers should formulate and advance strategies targeted at entrenching a knowledge-oriented business culture, structures and practices to ensure that KM is fully institutionalised across the SOE sector.

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## Competing interests

The author declares that they have no financial or personal relationships that may have inappropriately influenced him in writing this article.

## Author's contributions

M.P. is the sole author of this article.

## Ethical considerations

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## Data availability

Data used in this study are available and can be shared when required or necessary upon reasonable request to the author.

## Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of any affiliated agency of the author.

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