

A Baseline Review of the Knowledge Management Practices in the Parliament of South Africa

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Abstract

Parliaments are information-driven and knowledge resource intensive institutions. Parliaments' business is embedded in the demand for, and the use of quality information and knowledge. The impact of effective knowledge management (KM) practices in parliaments is noted as a key platform to enhance constitutional democracies. The research reviews the current KM practices and their effectiveness in the Parliament of South Africa and provides an understanding of what is working well and what is not. An exploratory research design was used in a combined approach. For the qualitative research, face-to-face structured interviews were conducted with fifteen selected senior managers to elicit their views. For the quantitative research, an on-line survey was distributed using Parliament's staff group e-mail account. The KM practices were assessed using a KM assessment tool based on seven organisational categories: KM leadership, people and culture, KM process (knowledge use), KM practices and resources, technology, KM outcomes, and learning and innovation. The research provides valuable guidelines and key considerations for senior managers in parliaments who are contemplating KM, or are in the initial stages of implementing KM. The research further recommends how to improve KM practices in the Parliament of South Africa.

Key Words: Knowledge Management Practices, Assessment Tools, Parliaments.

Introduction

Much has been written about knowledge as a strategic asset and resource, especially in modern-day, knowledge intensive organisations (Millar, Lockett and Mahon (2016). Many of these organisations have recognised the need to provide effective platforms for managing knowledge and to leverage this knowledge in order to grow profitability, to become more globally competitive, and to be responsive in a dynamic, changing environment (Jelenic, 2011; Alhawari, Nehari-Talet, Mansour, Alryalat and Musa-Hadi, 2010:174). Kruger and Johnson (2011) evaluates the relationship between knowledge management (KM) maturity and organisational performance of three industry groups in South Africa. Their findings show that in 55.5% of the nine organisations, there is a discernible correlation between KM maturity and organisational performance. This research is a baseline review of the KM practices in the Parliament of SA (Parliament) and their effectiveness. The review aims to understand Parliament's insight into its current KM practices and their effectiveness by attempting to uncover what these practices are, what is working well, what is not working well, and what can be improved.

Background to the Problem

The research aims to provide insight into how Parliament can effectively use KM to deliver the organisational impact necessary to achieve its strategic outcome goals as well as societal goals. In a globally connected world, knowledge has become a key strategic asset to organisations (Boštjan, Majewski and Damij, 2014; Jelenic, 2011), and parliaments are not excluded from this reality. The importance of this research is thus considered in the context of Parliament's constitutional mandate and the strategic policy direction of the organisation.

Legislative Mandate

Parliament's constitutional mandate is: "*South Africa is a constitutional democracy with a three-tier system of government and an independent judiciary*" (Parliament of the Republic of South Africa, 2016). Parliament is the legislative arm of the three different, interdependent organs of state, namely the executive (government and Cabinet), the legislature (national and provincial parliaments) and the judiciary (courts of law). At the centre of this system, are the people.

Problem Statement

Parliaments, by virtue of their constitutional mandates and functions, are information resource intensive organisations. This means that information and knowledge is at the core of their business processes, functions and activities. The sharing of knowledge amongst parliaments is noted as one of the key platforms to enhance constitutional democracies whilst the effective implementation of these KM practices is seen as a key challenge (Global Centre for ICT in Parliament, 2016). The effective implementation of these KM practices has been one of the key challenges for parliaments though. The problem is that there is limited or no knowledge internally regarding the KM practices in Parliament and their effectiveness. The assumptions are that knowledge is recognised as a strategic asset in Parliament and that it is mostly shared in an unstructured, informal manner and not linked to the strategic goals of Parliament. There has been no baseline review of where Parliament is regarding its KM practices. The only research done in Parliament in recent years was a literature review on KM in order to formulate a KM policy (Mphunga, 2012) and a Master's thesis on KM and Parliament's content management system (Sinyegwe, 2014).

Research Questions

The following are the research questions emanating from the research objectives:

- What are the current KM practices in Parliament?
- What is the effectiveness of the current KM practices?
- What are the inefficiencies of the current KM practices?
- What recommendations can be made to address the inefficiencies identified?

Significance of the Research

This research is the first of its kind in Parliament. There is limited or no knowledge internally regarding the effectiveness of KM practices used in Parliament. This research is very important in that it will establish a baseline of current KM practices and can assist to baseline its level of readiness for KM. It will also provide an understanding of what is working well and what is not working well. The recommendations for this research will also assist the Division Manager: Knowledge and Information Services (KIS), in the development and implementation of an integrated knowledge management strategy for Parliament, where the latter is an intended targeted strategic output for the 5th Parliament. The SA legislative sector, consisting

of the nine provincial legislatures and Parliament, will benefit from sharing the findings and recommendations of this research, thus contributing to the sharing of knowledge and building KM capacity in this sector. Similarly, parliaments on the African continent, especially those within the South African Development Community (SADC) can also benefit from sharing the findings of this research. The same can be said for parliaments across the globe.

Literature Review

Defining Knowledge Management

The Finnish parliament's Technology Assessment Project (TAP) Steering Group, consisting of Members representing various parliamentary committees and political parties, adopt a definition of KM that states "*knowledge management is a process where knowledge, skills, expertise and communication are cared for, administered and steered with skill and wisdom in a goal orientated fashion*" (Suurla, Markkula and Mustajärvi, 2002:31). They state that the organisation's KM vision and values require innovative and responsible leadership. Millar *et al.* (2016) find that the usefulness of knowledge in organisations is located in the knowledge being captured, stored, comprehended and accordingly transferred. Accordingly, Millar *et al.* (2016) propose that a targeted process is required which should integrate organisational elements such as systems, processes, people and leadership. Miklošik (2014) instead defines KM in a systemic manner through knowledge activities such as: identify, capturing, transform, store, and redistribute and apply, to enhance organisational decision-making. KM also involves the timeliness, relevance, accuracy, simplicity and cost-effectiveness in organising and presenting the information to the right persons at the right time (KM Best Practices, 2016). It emerges that there is no singular definition of what KM is. The following key considerations can be drawn from the definitions reviewed above:

- There are some broad levels of consistency in the KM descriptions.
- KM is multi-faceted and multi-dimensional in its approach.
- KM is also systematic and holistic as well as organisation-wide.
- KM is embedded in key organisational activities and organisational processes.
- The KM definition is continuously evolving.
- Tacit knowledge is different to explicit knowledge.
- Targeted organisational impact can be achieved through KM.
- KM requires innovative leadership.

The definitions describing KM provide a guided perspective to this research in that they present a viable strategic framework in which to execute the research. It is of particular relevance to Parliament, since the organisation is in the initial stages of developing its KM strategy and implementation plan. By embarking on this KM journey, Parliament should very early on, be in a position to define what KM is to the organisation.

Tacit and Explicit Knowledge

Hansen, Nohria and Tierney, (1999:9) provide distinct references to explicit and tacit knowledge. They refer to explicit knowledge as "*knowledge that can be codified*" and to tacit knowledge as "*knowledge that is acquired through personal experience*" or "*know how*". They further state that using the wrong approach or both approaches simultaneously as a strategy for managing knowledge could be detrimental to an organisation. Smith (2001:314) also approaches the tacit and explicit in different ways, where tacit knowledge is "*technical and cognitive*" in nature encompassing an individual's "*mental models, values, beliefs, perceptions, insights and assumptions*" and explicit knowledge is "*academic*" in nature or the "*know what*". Wang, Arnett and Hou (2016) show there is interaction in the exchange of tacit and explicit knowledge when knowledge is used to enhance learning and innovation on organisations. This view

augments the research of Oğuz and Şengün (2011) who found that whilst there is a contrast between the two approaches, tacit knowledge is a critical element in linking personal and individual value to overall organisational value and know-how. In summary, tacit knowledge is essentially different to explicit knowledge in its approach. Tacit knowledge can be of value to organisations when it is systemised through various organisational processes, structures and information systems. An understanding of the tacit and explicit knowledge in an organisation can provide managers with valuable insights into the development of KM practices. Parliament would thus first have to understand these two approaches to knowledge in order to implement appropriate organisational KM practices that can deliver value and meaningful impact.

KM Best Practice Frameworks

The first framework to be discussed is based on the Control Objectives for Information and Related Technology (COBIT) framework, which is the “*leading framework for the governance and management of enterprise IT*” (ISACA, 2016). The framework was developed by Information Systems Audit and Control Association (ISACA), “*an independent, non-profit global organisation engaged in the development and adoption and use of globally accepted industry-leading knowledge and practices for information systems*” (ISACA, 2016). The latest version of the framework is COBIT 5, adopted by ISACA in 2012, which includes “*managing knowledge*” as one of the 37 processes in its Process Reference Model (PRM) (ISACA, 2012:27,33). COBIT 5 defines enablers as “*factors or organisational resources that, individually and collectively influence whether something will work*”. Boštjan, *et al.* (2014) present findings of case studies in two organisations in which the COBIT 5 framework was used for assessing the level of KM.

The second framework is the Asian Productivity Organisation (APO) (Young, Nair, Ogiwara, Burnett and Prakash, 2010). This framework was developed by the APO after a fact-finding exercise to foremost KM institutions in Europe, USA, Australia and several countries in Asia in 2007 (APO, 2016). The APO KM Framework was developed as a reference guideline for organisations to improve productivity performance through KM. The critical success factors (CSFs) of the framework are the mission and vision at its epicentre that sets the strategic direction and the four accelerators – people, processes, leadership and technology – that are the organisational enablers. The five key knowledge processes are “*identify, create, store, share and apply*” and these are used in the initial assessment of existing KM practices. The APO also developed the APO KM assessment tool to assist organisations in conducting an initial assessment of its readiness for KM, more especially to “*determine if KM is already being practiced in the organisation and to what degree it is being applied*” (Young *et al.*, 2010). Table 2.3 describes the seven KM audit categories in the assessment tool. The KM framework developed by Downes (2014), has at its epicentre the KM processes in which the following activities are executed in relation to knowledge: “*creation; storage and retrieval; transfer; and application*”. Five people-focused organisational enablers surround the KM processes, namely strategy, culture, leadership, learning and people. ICT enables the KM processes. Because this framework was developed in relation to CSOs, external environmental factors that affect the operations of the organisation are also considered. The KM outcomes describe its impact on organisational performance and productivity. Downes (2014) thus defines a KM framework that holistically sets a foundation for implementing KM in organisations.

The viewpoints expressed by researchers, authors of KM frameworks, and leading best-practice organisations in ICT and KM, appear varied. These frameworks offer the following common insights:

- Embedding KM best practices in an organisation requires a holistic approach.
- There should be a methodology and implementation framework that support this holistic approach.
- There are common views as to what type of knowledge activities are included in the KM processes.
- Organisational enablers represent strategy, people, process, technology, culture, learning and leadership in an organisation.

- It is possible to use a KM framework to assess or review KM practices in organisations.
- KM frameworks are used in different types or sizes of organisation, such as government institutions.
- The outcomes of a KM framework can have an impact on organisational performance and productivity as well as on society (the people).

In order to leverage the opportunity of using published research and best practice, it was sensible for the researcher to combine the seven KM audit categories of the APO KM assessment tool with the KM framework developed by Downes (2014), so that it can be used in the research design.

Research Methodology

The most common forms of research designs are: “*casual-comparative*” that seeks “*to determine cause and effect*” between variables, factors or events; “*correlation*” that attempts to determine the association between the phenomenon; “*explanatory*” that aims to find the “*casual links*” between the phenomenon; “*descriptive*” that seeks to “*provide an accurate and valid representation*” of the phenomenon; and “*exploratory*” that addresses research where very little is known on the subject and seeks to “*identify the boundaries of the environment*” in which the phenomenon exists (Mancosa, 2016:17,18). The exploratory design approach was selected because of the following reasons: Parliament is at the initial stages of developing and implementing a sustainable KM strategy and the review of Parliament’s current KM practices is the first of its kind in the organisation. Hence, there is no data available on this specific subject matter. This type of research does not attempt to find the answers to why, when and how the phenomenon is occurring, rather to describe what is happening (Mancosa, 2016:17). The exploratory research design approach is thus viewed by the researcher to be an appropriate and useful tool.

Combined Research Approach

Golafshani (2003) cites Patton (2001) who argues that using a combination of both qualitative and quantitative design methodologies can strengthen the research, since it is likely to provide the researcher with two independent, yet complimentary research findings. Creswell (2003) further concludes that an added benefit of using the combined approach is that the one methodology does not have to be dependent on the other. Based on the above arguments, a combined approach using both the qualitative and quantitative research was chosen.

Qualitative (Phenomenological) Research

Johnson and Christensen (2008:34) states that the most common qualitative methodologies are “*phenomenology, grounded theory and ethnography*”. Phenomenology involves research that aims to seek the subjective experience and views of a selected group of participants (Johnson and Christensen, 2008). Phenomenology also involves observing and measuring “*phenomena*” and “*questionnaires are most widely used in surveys with descriptive or exploratory purposes*” (Mancosa, 2012:56,92). The reasons for selecting qualitative research were the following. Face-to-face interviews with selected participants were conducted. The selected participants had sound knowledge of the subject matter, as well as an in-depth knowledge of their individual specific work areas and the business of Parliament. A standard, structured questionnaire, with open-ended questions was used to record the views of the participants. The above reasons are supported by the classification of steps that is broadly defined for phenomenological research (Mancosa, 2012:57). The qualitative research methodology provides a useful and suitable tool to gain insight into the underlying opinions and views of the selected participants (Mancosa, 2016:18, cites Wyse, 2011).

Quantitative (Positivist) Research

Garfield (2014) notes that surveys are “*essential at the start of a KM initiative to ensure that the program meets the needs of the organisation*”. Similarly, “*the survey is a positivist research design in which a sample is selected from a population and studied to make inferences about the population*” (Mancosa, 2012:60). The reasons for using quantitative research were the following. An on-line survey tool was used for the design, analysis and reporting of the on-line survey (SurveyMonkey, 2016). The on-line survey contained 9 structured, closed-ended questions. Whilst quantitative research may reduce the strength of the findings because not all social experiences may be accurately measured, this approach provided an appropriate and useful methodology to objectively observe the views and opinions of a much larger group of participants in Parliament (Johnson and Christensen, 2008).

Sampling

The research was done within one organisation, Parliament. The population of staff in Parliament is about 1 300. Sampling was used for both the qualitative and the quantitative research.

Sampling (Qualitative): The suitable sample size for qualitative research is 8 to 10 participants (Mancosa, 2012:67-86). Lichtman (2006) and Cooper and Schindler (2003), further recommend the non-probability sampling approach for subjective research in which individual respondents are pre-selected. The target sample used for the qualitative research was senior managers in Parliament who are responsible for delivering key information and knowledge resources. The senior managers were thus known participants. The participants were selected because they each have a sound knowledge of the subject matter, as well as an in-depth knowledge of their individual specific work areas and the business of Parliament. The sample size for the qualitative research was thus fifteen participants.

Sampling (Quantitative): Lichtman (2006) and Cooper and Schindler’s (2003) advocate that probability sampling should be used when it is left to each individual to choose whether to participate in a survey or not. The suitable sample size for quantitative research is a minimum of 100 participants (Mancosa, 2012:67-86). There are alternative guidelines to determine a suitable sample size in terms of margin of error and confidence level (SurveyMonkey, 2016).

Data Collection Instruments

Primary data were collected when using this combined approach. A standard, structured questionnaire was used for the qualitative research and an on-line survey was used for the quantitative research.

The Questionnaire (Qualitative): The questionnaire for the qualitative research was adapted from a diagnostic questionnaire used by Moollan (2004). The seven audit categories of the APO KM assessment tool were also used to group the questions: They are KM leadership, KM Process, People and Culture, Technology (ICT), KM Practice, Learning and Innovation and KM Outcomes (Young *et al.*, 2010). The following were considered in the design of the questionnaire. It was good practice to adapt the questionnaire from a diagnostic questionnaire that had already been validated and published (Moollan, 2004). The questions in the diagnostic questionnaire from Moollan (2004) were easily adapted to the research objectives.

The On-line Survey (Quantitative): The questions used in the on-line survey were adapted from Downes’s (2014) framework as well as the audit categories of the APO KM assessment tool (Young *et al.*, 2010). Downes’s (2014) framework provided a structured context in which the KM practices were assessed. The seven audit categories of the APO KM assessment tool were also used to group the questions. They are KM leadership, Process, People and Culture, Technology, Knowledge Processes, Learning and Innovation, and KM Outcomes (Young *et al.*, 2010). The following were considered when designing the

on-line survey questions: It was good practice to adapt the questions of the on-line survey to a validated and published framework developed by Downes (2014). It was good practice to group the questions to a proven KM assessment tool (Young *et al.*, 2010). The questions in Downes's (2014) framework could be easily be adapted and aligned to the research objectives and research questions.

Data Analysis

Patton (2001), as cited by Golafshani (2003:603), states that “*triangulation strengthens a study by combining methods*”, meaning that a combined approach with the qualitative and quantitative design methods is encouraged for more valid and reliable results. Johnson and Christensen (2008:34) provide a key distinction between the two approaches and state “*quantitative design aims to control for bias so that facts and instances can be understood in an objective way, whilst qualitative design aims to understand the perspective of participants by assessing their experience*”. The data collected and analysed using the combined approach strengthen the validity and reliability of the results.

Data Analysis (Qualitative): Thematic analysis is generally viewed as “*an accessible and theoretical approach to analysing qualitative data*” (Braun and Clarke, 2006:59). Vaismoradi, Turunen and Bondas (2013) conclude that whilst there are many similarities between content and thematic analysis, the key difference is that in content analysis determining the frequency count can be used as an opportunity to quantify the data. Content analysis was used to analyse the data. Themes were used to code and categorise the responses. In most cases, the themes were based on keywords identified from the interview data, and in some cases, these keywords were also aligned to prior coding concepts highlighted in the literature review section. A frequency count was conducted to quantify the data (Bankole *et al.*, 2012).

Data Analysis (Quantitative): The SurveyMonkey tool was selected because of the following benefits. Elimination of bias customised reporting, built-in reports, presentation ready charts and real-time responses and results. Descriptive analysis was used to analyse the data. Data analysed using an on-line survey tool are generally descriptive since it provides a description of the data such as averages, frequencies, means, standard deviations and percentages (SurveyMonkey, 2016; Analyse This, 2016; Mancosa, 2012:129). In this particular case, a rating scale from 1-5 was used for each closed-ended question, with 1=highly disagree, 2=disagree, 3=unsure, 4=agree and 5=highly agree. The on-line survey tool calculated the rating averages for each of the responses and produced a descriptive statistical summary of the views of participants.

Ethical Considerations

A research agreement was signed between the researcher, Ms Fatima Boltman, the Head of Research at Mancosa and the Secretary to Parliament (STP). The STP also approved and signed a memorandum requesting permission to conduct the research in Parliament prior to signing the research agreement. Clause 2 of the research agreement refers to the permission to conduct empirical research. Clause 3 of the research agreement refers to conditions that specify guidelines that the researcher and the participants should be aware of. Clause 4 of the research agreement refers to the conditions for publication. For the qualitative research, the rights of participants to participate and protecting their anonymity were handled at the beginning of the interview process where the researcher explained the purpose of the consent form.

Validity and Reliability

Validity seeks to determine whether the researcher has actually measured what was set out in the research objectives. There are four types of validity: face validity, content validity, criterion validity and concurrent validity (Mancosa, 2016:24; Mancosa, 2012:102). For the qualitative research instrument, face, content and concurrent validity were used. Face validity was used by selecting participants who have sound knowledge

of the subject matter, as well as an in-depth knowledge of their individual specific work areas and the business of Parliament. Content validity was used in that the opinions of two senior managers as well as the Division Manager for KIS were sought to test the adequacy of the questionnaire and the suitability of the questions. Minor changes were effected based on their feedback before the research instrument was applied. The research questions were only concerned with the review of current KM practices and its effectiveness. No other subject matter in any other related area of KM was presented in the research questions. Concurrent validity was used since the questions on the research instrument were grouped according to the KM assessment tool (Young *et al.*, 2010) and thus the responses at the individual question level would be comparable to assessing Parliament's overall behaviour in any of the audit categories. The selection of knowledgeable participants on the subject matter, the efforts made to ensure meticulous alignment of the questions to the research objectives, as well as grouping the questions according to the KM assessment tool (Young *et al.*, 2010), strengthened the validity and credibility of the qualitative research instrument. For the quantitative research instrument, the same concurrent validity approach was used. For the face validity, whilst the questions remained restricted to the subject matter of reviewing the KM practices and its effectiveness, the sample was much bigger and the participants were not pre-selected, thus eliminating a potential bias from the research. In addition to this, a pilot on-line survey was conducted with 20 selected participants to test for the adequacy and applicability of the questions. Content validity was also used, in that the on-line survey was further tested for adequacy and quality with five staff members. Reliability seeks to ascertain whether the questions can yield dependable and consistent results. For the qualitative research instrument, test-retest reliability was measured when the same questionnaire was used in the fourteen interviews. An on-line survey was used for the quantitative research instrument. This is a parallel forms reliability since this is the second instrument (in addition to the pilot on-line survey) that was used in the combined approach to test the consistency and dependability of the results.

Elimination of Bias

For the quantitative research instrument, the participant's demographic information was confined to only confirming the number of years working in Parliament. For the qualitative research instrument, the participant's demographic information was confined to confirming designation, work area and the number of years working in Parliament. No gender, age, and racial demographic information were requested, since the aim of the research is to do a baseline review of the perceptions and views of the organisation as a whole.

Qualitative Results

The qualitative results are based on fourteen interviews and one written reply concluded with senior managers in Parliament, using a standard, structured, open-ended questionnaire (n=15). The sample size is more than the recommended sample size of 10 which affirms that the results can be generalised to the population of Parliament (Mancosa, 2012:67-86). The results show that an overwhelming majority of the selected participants - based on their knowledge of the subject matter, as well as their in-depth knowledge of their individual specific work areas and the business of Parliament - had more than 5 years working service. Six participants in Parliament had more than fifteen years work experience, four participants with between five and ten years work experience and three with work experience of between 10 and 15 years.

Defining Knowledge Management

The results show a distinct pattern in that the participants' collective view is that there is no singular theoretical definition for KM. Defining KM to encompass data management processes such as collect, store, amend, access and re-use are implied 12 times.

Defining Knowledge Management Practices

The results show a fundamental pattern in that the participants' view KM practices mostly from a KM process perspective (ISACA, 2012:33; Mansour, Alhawari, Nehari-Talet, and Al-Jarrah, 2011:866) rather than from a holistic KM best practice framework perspective (ISACA, 2012:27,33; Boštjan et al., 2014; Young *et al.*, 2010; KM Best Practices, 2016; Downes, 2014). None of the participants viewed KM practices through a holistic KM best practices framework. The consolidated view from the participants is thus that KM is practiced in Parliament, through five key KM processes (Young *et al.*, 2010; Karadsheh et al., 2009 cites Albers and Brewer, 2003). Whilst the results are not exactly homogenous in that there is a single common view of KM practices, it does show a consistency in the understanding of the type of knowledge practices the participants associate Parliament with. The five practices are identify/acquire, create, store, share and re-use.

KM Leadership (Strategy and Policy)

The results show that whilst there is an overwhelming view from participants that knowledge adds value and is a strategic asset and resource in Parliament as well as there is a link between knowledge to organisational performance and outcomes, there is a less-than-positive view of Parliament's KM leadership efforts, in relation to the development of the KM strategy and KM policy formulation. The literature supports the view that knowledge is a strategic asset to organisations globally (Boštjan et al., 2014; Jelenic, 2011), especially in knowledge intensive organisations (Millar et al., 2016). Greiner, Böhmman and Krcmar (2007) find that the most successful KM projects are driven by a goal to add value to the organisation. The results also show that knowledge is viewed as critical for planning, decision-making and is integral to performing key work functions. Kruger and Johnson (2011) find that there is a discernible correlation between KM maturity and organisational performance, making this an area of development for Parliament. Members of the respective management teams frequently talk about KM, even though it may not be in a structured manner.

People and Culture

The results show that the managers collectively expressed a positive view of Parliament's ability to create and sustain a KM culture. Their views, however, also highlighted reservations in this ability. Their positive views are largely based on the existing ICT and knowledge-based systems implemented, the type and level of people appointed, the relevant financial resources and having the appropriate the tools to train and educate staff. The reservation expressed are largely due: to a lack of technical skills, that the right resources are not appropriately channelled, a lack of will power to deliver and a lack of a coherent effort and leadership to pursue KM.

The results also show that Parliament engages both formally and informally in KM practices, with a leaning more towards informal engagement. The managers are mainly of the view that there are staff in their areas who are currently promoting and willing to promote KM and that the benefits of KM are actively communicated to staff, even though more than half are of the view that knowledge is not easily shared amongst peers. However, in this case, distinction is made between sharing and articulating the benefits of KM at a business unit level versus organisation-wide.

KM Process: Using Knowledge

The results show there is a slightly positive view of how knowledge is used in implementing and improving key work process in Parliament. Knowledge is mostly used to assist in the effective planning and implementation of work tasks, in analysis and evaluation and in decision-making. Creating a better understanding, making knowledge easily accessible, lessons learnt and most importantly sharing the knowledge are used to improve key work processes. Whilst the participants view knowledge as an integral

part of their work functions, most participants do not distinguish between their work specific standard operating procedures (SOPs) and SOPs for sharing knowledge and ideas.

Technology (ICT)

The role of ICT as an enabler for managing knowledge in organisations is important. Gressgård, Amundsen, Aasen and Hansen (2014) find that ICT tools can support the processes of knowledge use, acquisition and dissemination in organisations that focus on employee-driven innovation. The results show that the participants view Parliament as an organisation that has the ability to develop and deliver knowledge-based technology (ICT) resources for work purposes (Young *et al.*, 2010). This is a positive view of Parliament using ICT as an enabler for accessing knowledge. All the participants indicate that Parliament has ICT resources that they frequently use for accessing knowledge whilst the majority indicate that they are also able to use external resources via Parliament's ICT network. The participants could also easily list the common ICT resources used as well as identify new requirements for knowledge resources that can be made accessible via ICTs.

KM Practices and Resources

The results show a slightly positive view of Parliament's "*ability to create, store, share and apply knowledge systematically*" (Young *et al.*, 2010). Personal networks are more relied upon to access knowledge resources that are needed even if participants do not know if or where it exists. The knowledge that needs to be generated is mostly explicit. Contacting a person or persons and electronic means are mostly used to access knowledge. Using a physical paper-based product and observation are done less frequently. Logical deduction, reasoning and the type of knowledge required, also determine the choice of access. Knowledge is stored using electronic technology platforms such as transactional systems, central document storage, hard-drives, H-drive (the network drive) and memory sticks. The hard-drives and H-drives are preferred more than the central document management system (uVimba). Even though, the electronic medium is widely used to share knowledge, the central document management system is not leveraged to its maximum. E-mail systems may still be the preferred option for sharing knowledge. Workshops, seminars, hard copies and person-to-person contact continue to be used as a means to share knowledge. Existing knowledge stored in any format, whether electronic or in hard copy is re-used. The re-use of knowledge is directly dependent on the storage and accessibility of the older existing knowledge.

Learning and Innovation

Kuo's (2011) key finding is that when learning is improved in an organisation, innovation improves, which leads to the increase in the development of the KM capability and eventually lead to enhanced organisational performance. The results show there is slightly positive view of Parliament supporting learning and innovation in a systematic way even though some participants are still of the view that the environment, culture and leadership are not conducive to encourage and support this. The participants indicate that whilst there is a bursary scheme and training budgets (albeit limited), the skills development process in Parliament is not integrated and coherent.

The Effectiveness of the Current KM Practices

The five coding themes are KM leadership, people and culture, KM process (knowledge use), technology (ICT) and KM practices and resources. The results show that whilst participants imply effectiveness in all 5 domains, the lowest levels are in KM leadership and people and culture. The three effective methods for sharing knowledge that are used interchangeably are electronic, face-to-face and hard copy with electronic being the most frequently used. Downes and Marchant (2016) find that whilst the effectiveness of KM was reasonable in CSO's, a formal KM policy ensured greater effectiveness. Face-to-face sharing of knowledge was still found to be an effective method.

The Inefficiencies of the Current KM Practices

The five coding themes are KM leadership, people and culture, KM process (knowledge use), technology (ICT) and KM practices and resources. The results show that participants imply that there are inefficiencies in all five domains, the highest being in the KM process, KM practices and resources and the people and culture domains. The results also show that challenges are experienced within all five domains. The participants listed the challenges that they experienced. The majority of participants indicate that they have not stopped any of their current methods of sharing knowledge because it is ineffective.

The participants listed the challenges that they experienced:

- Not knowing what the knowledge is in people's minds.
- Not knowing who the knowledge experts are in the organisation.
- Parliament lacks a culture of sharing.
- A lack in documenting practices and standards.
- Trying to access information that is not documented.
- Not finding the relevant information.
- Not leveraging the ICT system for its benefits e.g. uVimba.
- Parliament is still at the beginning stages of the KM initiative.
- All the factors need to be brought together in a coherent manner – culture, technology and processes.
- KM is not defined. There are loose arrangements and Parliament does not have a policy.
- The KM Strategy is not fully implemented, stops and starts within different Units, it is not holistic and integrated.
- KM does not appear to be recognised as a particular mechanism.
- We do not have a KM strategy that would support all stated goals.
- A lack in communication culture and do not adhere to the aims of communication.
- The central part is not there i.e. the desire to make KM a key issue in the organisation is not there.
- There is a culture issue in the institution.
- Staff do not clearly understand the benefits of KM.
- Need good systems.
- There is an issue of quality information even though there are systems.
- Lack of cohesion amongst the various divisions in Parliament. Some divisions still operate in silos, which cause slow and/or a lack in service delivery.

Recommendations to Improve the Current KM Practices

The seven coding themes are KM leadership, people and culture, KM process (knowledge use), technology (ICT), KM practices and resources, learning and innovation and KM outcomes. The results show that whilst recommendations were made to improve the current KM practices across all seven domains, the majority of the participants make recommendations in the KM leadership domain (11 participants) and the people and culture domain (8 participants).

Recommendations to Sustain a Learning and KM Culture

The results show that whilst recommendations were made for sustaining a learning and KM culture across all seven domains, the majority of the participants make recommendations in the people and culture domain (8 participants) and the least recommendations are made in the KM process (knowledge use) domain. 3 participants make recommendations in the technology (ICT) domain.

Quantitative Results

The quantitative results are based on 106 participants who responded to the on-line survey (n=106). A rating scale from 1-5 was used for each question, with 1=highly disagree, 2=disagree, 3=unsure, 4=agree and 5=highly agree. If the rating average is below 3, then it is viewed as less-than-positive. Likewise, if the rating average is above 3 then it is viewed as positive. The results and findings are discussed according to the four research objectives. The results are presented in graphical format using the rating averages per question.

The tables describe the response rates per question as a percentage of the total responses. 106 staff participating in the on-line survey denote that the sample is within the expected margin of error of 10% (SurveyMonkey, 2016). This affirms that the results are representative of the population surveyed in Parliament. The results show that the larger percentage of participants (34 participants = 32.1%) are working for more than 15 years, whilst 3.8% (4 participants) are working for less than 1 year. The years of work experience thus show a range of years from one to more than fifteen. Thus, it appears that the participants, in terms of their years of experience should have sound knowledge of their specific work areas and the business of Parliament. This finding strengthens the measure of face validity for this research instrument (Mancosa, 2016:24; Mancosa, 2012:102).

KM Leadership (Strategy and Policy)

The results show that the overall rating average in the KM leadership domain is 2.89. The results reflect a less-than-positive view of Parliament's ability and efforts in this domain, even though the results show strong agreement that knowledge is a strategic asset and resource in Parliament.

People and Culture

The overall rating average in the people and culture domain is 2.48. This is the domain with the second lowest overall rating average. The results reflect a less-than-positive view of Parliament's "*ability to create and sustain a knowledge management culture*" (Young *et al.*, 2010) especially in the following areas: encouraging the exchange of ideas and knowledge between individuals and groups, valuing individuals for their expert knowledge, having a knowledge sharing culture and the management style.

KM Process: Using Knowledge

Millar *et al.* (2016) find that knowledge is viewed as an organisational asset in knowledge intensive organisations in the manner that it is used to acquire, store, organise, share and access it. The overall rating average in the KM process (knowledge use) domain is 3.21. The results show a slightly positive view of how knowledge is used in implementing and managing key work processes (Young *et al.*, 2010).

Technology (ICT)

Islam, Jasimuddin and Hasan (2015) explain the role and the positive effect ICT infrastructure have on sharing knowledge in multinational organisations. The overall rating average in the technology (ICT) domain is 3.44. This is the domain with the highest overall rating average. The results reflect a positive view of Parliament's ability to implement knowledge-based ICT solutions (Young *et al.*, 2010). The results also show that more participants agree than disagree with the view that the ICT systems in Parliament can be trusted, are reliable and are easily accessible for work purposes.

KM Practices and Resources

The overall rating average in the KM practices and resources domain is 2.79. The results show a less-than-positive view of Parliament's "*ability to create, store, share and apply knowledge systematically*" (Young *et al.*, 2010). The results also show that there are two questions with rating averages above three, pertaining to the storing (3.55) and accessing (3.09) of knowledge. The three KM practices with rating averages below three are identifying, creating and applying. The results thus reflect that participants view Parliament's ability to store and access knowledge in a more positive light.

Learning and Innovation

Innovation is the lifeblood of organisations in the global dynamic business climate and innovation is dependent on the availability of knowledge and how successfully it is managed (du Plessis, 2007). The results show the overall rating average in the learning and innovation domain is 2.19. This is the domain with the lowest overall rating score. The results thus reflect a less-than-positive view of Parliament's ability to create and sustain a learning and innovative environment (Young *et al.*, 2010). The participants' views are that there is a lack of support and encouragement for the following processes and areas in Parliament: retaining institutional knowledge, using lessons learnt to improve work process, appropriate recognition systems, acknowledging and rewarding staff and appropriate resources for the training of staff in KM.

Level of Effectiveness of Current KM Practices

KM Outcome

The overall rating average in the KM outcome domain is 2.83. The results reflect a less-than-positive view of Parliament's ability to build an effective and efficient organisation through the effective use of knowledge resources (Young *et al.*, 2010).

Level of Effectiveness of KM Processes

The results show that 4 of the knowledge process areas' rating averages are below 3.0. They are knowledge generation, knowledge access, knowledge sharing and knowledge re-use. The results reflect that the views of the participants are leaning more between being ineffective and being unsure.

Recommendations to Improve the Current KM Practices

The seven coding themes are KM leadership, people and culture, KM process (knowledge use), technology (ICT), KM practices and resources, learning and innovation and KM outcomes. The results show that the highest number of recommendations (20) are made in the KM practices & resources domain whilst the lowest number of recommendations (3) are made in the KM outcomes domain. Recommendations were made across all seven domains. 17 recommendations are made in the people and culture domain, whilst 8 are made in both the KM process and ICT domains.

Recommendations to Sustain a Learning and KM Culture

The seven coding themes are KM leadership, people and culture, KM process (knowledge use), technology (ICT), KM practices and resources, learning and innovation and KM outcomes. The results show that the highest number of recommendations (23) are made in the people and culture domain, with 21 recommendations made in the learning and innovation domain. The results show that people and culture as well as learning and innovation are emphasised for sustaining a KM culture. 10 recommendations are made in the KM leadership and KM practices domains, whilst 4 recommendations are made in the KM process and KM outcomes domains.

Conclusion and Recommendations

Findings from the Literature Review

The literature shows that there is no single definition of KM and that organisations assign different meanings to the term, depending on their unique environment. The definitions for KM are multidimensional and holistic, yet systematic in their approach, encompassing key organisational elements and processes to achieve the organisational impact required. KM is thus continuously evolving. The literature further highlights two fundamental philosophical orientations to KM i.e. explicit and implicit knowledge. Understanding and identifying the tacit and explicit knowledge can provide managers with valuable insights into the development and sustainability of KM practices. The relationship between explicit and tacit knowledge needs to be considered in order to leverage knowledge. There is no single view of a KM framework and the viewpoints expressed appear varied, with KM frameworks being peculiar to the type of organisation in which they are found. Implementing KM requires a holistic approach using organisational enablers. Organisations implement KM in different ways in relation to the execution of KM practices. The number of steps within a KM process model can vary between three and eight depending on the type of KM process model used. Few parliaments globally and within the SA legislative sector have addressed this research topic in a holistic manner. The literature shows that none of these parliaments has executed a baseline review of KM practices. The effective implementation of knowledge-sharing strategies is dependent upon assessing the barriers to knowledge sharing. Assessing an organisation's readiness and capabilities should be key considerations, as KM strategies vary, based on the particular strengths, weaknesses, opportunities and benefits for the organisation.

Findings from the Primary Research

The findings reflect the results of the baseline review of KM practices and their effectiveness in Parliament. The qualitative research shows that, irrespective of the years of work experience of the participants, there exists a sound and wide-ranging understanding of KM. There is also an understanding from participants that KM practices can include process steps such as knowledge acquisition, creation, storage, sharing and re-use. The quantitative research shows that participants with more years of work experience had a higher participation rate than those with the least work experience.

KM Leadership: The quantitative results show there is a less-than-positive view of Parliament's ability and efforts in KM leadership. The qualitative research strengthens this opinion only in the results that show that the majority view that there is no KM strategy or policy in place. There was consensus, though, in both sets of results that knowledge is a strategic asset and resource that adds value to Parliament and that KM is linked to the strategic outcome goals of the organisation (Boštjan *et al.*, 2014; Jelenic, 2011; Millar *et al.*, 2016; Greiner *et al.*, 2007).

People and Culture: The quantitative results show there is a less-than-positive view of Parliament's "ability to create and sustain a knowledge management culture" (Young *et al.*, 2010). The qualitative research, however, contradicts this view in that the results show unanimity in the view that Parliament has the ability to create and sustain a KM culture even though there were certain reservations about its ability to implement such an environment. Mahmoudsalehi, Moradkhannejad and Safari (2012) suggest that there is a positive relationship between KM and organisational structure, asserting that, if there was a less bureaucratic structure and a more informal culture, KM would be improved.

KM Process (Using Knowledge): The quantitative results show a slightly positive view of how knowledge is used in "managing, implementing and improving key work processes" (Young *et al.*, 2010). Knowledge is used in the implementation and improvement of key work processes. The qualitative results strongly augment the perception that knowledge is used mostly to assist in the effective planning and

implementation of work tasks, in analysis and evaluation and in decision-making. The combined results show that participants view knowledge as integral to implementing and improving key work processes (Young *et al.*, 2010).

Technology (ICT): The quantitative results show a positive view of the “*ability to develop and deliver knowledge-based ICT solutions*” (Young *et al.*, 2010). The qualitative results strongly support this positive view of the important role ICT plays as an enabler in managing knowledge-based resources in organisations (Gressgård *et al.*, 2014).

KM Practices and Resources: The quantitative results show a less-than-positive view of Parliament’s “*ability to create, store, share and apply knowledge systematically*” (Young *et al.*, 2010). The qualitative results, however, contradicts this view in that the results show that managers know where the information is and that electronic means are mostly used to store and share knowledge.

Learning and Innovation: The quantitative results show a less-than-positive view of Parliament’s ability to create and sustain a learning and innovative environment (Young *et al.*, 2010). The qualitative results on the other hand show a slightly positive view. Downes and Marchant (2016) suggest that incentivising staff and recognising work efforts in CSO’s will positively influence learning and sharing of new ideas.

KM Outcomes: The quantitative results show a less-than-positive view of Parliament’s “*ability to increase productivity and quality through the effective use of its resources*” (Young *et al.*, 2010). The qualitative results support this view. Managers mentioned challenges with all the key organisational elements, with the foremost expressed within the people and culture domain. Smith and Lumba (2008) in their investigation into KM practices used and the challenges experienced within networked organisations found that certain KM practices could inhibit or promote KM.

Level of Effectiveness of Current KM Practices: The quantitative results show that the overall response is a less-than-positive view. The qualitative results support this view to a limited extent. The qualitative results imply there are three organisational elements that are not working well. They are people and culture, knowledge practices and resources and KM process (knowledge use). Thus, systematically embedding KM and using knowledge to improve work processes are not effective practices.

Improving the Current KM Practices: The quantitative results show that the recommendations made encompass all the organisational elements with emphasis placed on two domains: people and culture, and KM practices and resources. The qualitative results highlighted a similar view, except that the recommendations in the KM leadership and people and culture domains are emphasised.

Sustaining a Learning Environment and KM Culture: Both the quantitative and qualitative results show that a holistic approach was undertaken in relation to the recommendations for sustaining a learning environment and KM culture, with more emphasis placed on the people and culture domain.

Conclusion to the Findings

The objectives of the research were to review the current KM practices in Parliament and its effectiveness as well as to make recommendations for improvement. The research achieved its objectives. Since this was the first time such a review was done in Parliament, the qualitative research instrument resulted in a large amount of data collected and analysed. While this may have been time consuming, it did not present any limitation to this part of the research. The quantitative research instrument was much more clinical and proved to be an easier mechanism for the analysis of the data. The combined approach however, resulted in an effective research methodology, as using both instruments strengthened the outcomes of the research objectives.

The findings provide a clear baseline assessment in relation to Parliament of South Africa's readiness and capacity for KM as well as the level of effectiveness of the current KM practices. There is room for improvement in all organisational elements of KM, with emphasis on people and culture and KM leadership, which should be further exploited. The research also provides a valuable tool for assessing KM practices. The key considerations and recommendations can be used by senior managers in parliaments who are contemplating KM or are in the initial stages of implementing KM.

Recommendations

Since the implementation of the KM strategy is more of a holistic approach (Suurla *et al.*, 2002; Downes, 2014) recommendations are made for transformative, organisation-wide interventions:

Organisational Structure and KM Outcomes

- Intervention plans should be developed as part of a holistic, integrated KM strategy, which should comprise of inter alia, implementation techniques, methodologies, standards, clear benefits, objectives and performance indicators.
- Integrated teams and sub-project teams of knowledge experts and core business representatives should be championed that can effectively spearhead the implementation of the KM strategy.
- The appropriate governance structures should be set up to support the implementation, monitoring and communication of progress.

KM Leadership Approach and Style

- A clear vision showing what benefits the KM strategy would bring to Parliament, as well as Members and staff and what the anticipated outcomes would be, should be established.
- The KM strategy and its benefits should be communicated widely in Parliament.
- The KM policy should be developed and implemented.
- Senior management should collectively set the standard and implement the organisational KM values through their actions as well as effectively communicating these at all levels.
- The KM leadership style should be flexible, collaborative and highly responsive to the knowledge needs of Members and staff.
- There should be meaningful engagement at all levels in order to bring about organisational effectiveness and productivity.
- The required KM change behaviours should be demonstrated by "*walking the talk*" with the changes that are required (participant, personal communication, September 2016).

Change in Organisational Culture and Behaviour

- A strong organisational culture is critical to achieving success with KM initiatives. Change is most effective when it is sponsored and championed by senior executive management and supported by middle management (Mancosa, 2015:56,57).
- The knowledge worker relationship is an interactive eco-system. Sharing knowledge should be based on "*mutual trust and openness*" (Mancosa, 2015:74).
- The Organisational Development (OD) practitioners should also be involved in the planning and implementation activities, to ensure appropriate change management.

Emphasis on People

- Emphasis should be placed on better utilisation of staff resources, improving staff morale, motivating staff, incentivising staff and building good staff relations.

- Recognise and acknowledge the human aspect by understanding that Members and staff may have different needs and different ways of reacting to the implementation of the KM strategy.
- The integrated task teams and sub-project teams should focus on building people trust to minimise resistance.
- Staff input should be more about how the KM strategy can be implemented, than about whether it should be implemented in the first place.

Internal KM Practices and Processes

- Methods for effectively managing knowledge and improving knowledge use should be structured, standardised and in line with industry best practice.
- A CSF for implementing any change initiative is the process of gathering information and doing a detailed analysis of the causes of organisational ineffectiveness (Mancosa, 2015:85). OD techniques should be used to identify the specific problem areas, analyse these and assess the performance gaps for KM.
- Methods of sharing knowledge that are currently effective should be widely communicated and leveraged across Parliament.

Opportunities for Learning and Innovation

- Facilitate support and provide flexible incentive mechanisms for those who participate in the KM process.
- Exhibit active sponsorship by participating and interacting with staff. An example of this is the participation of senior managers in training sessions.
- Focus attention on the changes that are occurring in the KM implementation process by assessing its progress, learning lessons and identifying any resistance factors.
- Obtain feedback and act upon the feedback by finding out how to improve and then communicate the decisions back into Parliament.

Technology (ICT)

- The current knowledge-based ICT resources implemented should be optimally leveraged and adoption encouraged.

Limitations of the Research

The population selected was the staff of Parliament and did not include the Members. Thus, the ability to build a more inclusive evidence source for the baseline review was limited. Regarding the quantitative results, failure to use a probability sampling method for the distributed e-mails limited the researcher's ability to make a more reliable generalisation to the selected population. Regarding the quantitative results, the progressive decrease in response rates for the closed-ended questions resulted in a lack of data that limited the researcher's ability to make consistent and reliable deductions from these questions.

Areas of Further Research

The points noted in the limitations of the research provide opportunities for future research in parliaments as well as improvement in the quantitative research design. Based on the literature review findings of the lack of baseline KM reviews done in parliaments, as well as this research being the first of its kind in Parliament, the deficit in this particular knowledge base can still be addressed by future research, particularly in other parliaments. Members can be included in the population survey or can be researched separately. Regarding the quantitative research design, areas for improving the on-line response rates

should be explored within the context of a specific organisation's culture and behaviour regarding on-line surveys.

Conclusion

The literature and findings demonstrate that a KM framework can be used effectively to review current KM practices in the legislative sector, and more specifically in parliaments. Understanding KM and developing a common and shared understanding can provide a practical context within which to implement a KM strategy. This understanding underpins the implementation of appropriate organisational KM practices that can deliver meaningful value and impact and thus move South Africa's Parliament to its next level of maturity and capability in KM. The value for Parliament lies in its ability to intermittently assess its status regarding KM and, bearing its own strategic outcomes and developmental goals in mind, adapt the implementation roadmap to take the institution where it wants to be.

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