

KNOWLEDGE MANAGEMENT PERCEPTIONS IN TWO MUNICIPAL UNITS

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Abstract

Few researchers have studied the perceptions of employees about knowledge management and processes for converting tacit into explicit knowledge within the public service, especially in local government. The purpose of this study is to gain knowledge about, and insight into, employees' perceptions about the factors that contribute to strategies for managing knowledge, knowledge management processes to convert tacit into explicit knowledge, as well as their views regarding the implementation of knowledge management strategies, and their perceptions about the ways in which knowledge management can contribute to organizational effectiveness and efficiency in their workplace. The census approach was used and data was collected using questionnaires which were administered to 80 employees of eThekweni Municipality, of which 66 questionnaires were suitably completed. Results of the article indicate that there exist significant relationships amongst the key variables of the study relating to knowledge management, and that each of the areas of knowledge management studied needs improvement.

Keywords: Tacit/Explicit Knowledge, Local Government, eThekweni Municipality

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1 Introduction

A vital aspect of a modern society's success is that the knowledge that its citizens possess is made available to its public servants, and is embedded in structural and other intellectual capital assets that can be leveraged internally and in the global market. It becomes a new responsibility to manage knowledge to strengthen public service effectiveness and improve the society it serves (Lee & Lee, 2007). The concept of knowledge management can be traced back to the 1950s, known as the decade of electronic data processing. Gamble & Blackwell (2001) confirm that this decade was associated with quantitative management techniques such as the Project Evaluation and Review Technique (PERT) and highly structured management approaches, such as Management by Objectives (MBO). In recent years knowledge management has come to be regarded as creating new knowledge (Cabrera & Cabrera, 2002), locating, storing and retrieving data (Hollingshead, Fulk & Monge, 2002), and knowledge acquisition and transmission (Lowendahl, Revang & Fosstenlokken, 2001).

The effective management of a firm's knowledge assets is an essential factor in achieving a sustainable competitive advantage in today's market (Drucker, 2001). However, in the South African context, local government institutions such as eThekweni Municipality are failing to initiate and implement knowledge management-programmes in all units. Conversely, in the South African private sector, organizations have invested in human capital and have reaped rewards from promoting the transfer of tacit to explicit knowledge which is mainly used for innovation and creativity, thereby bringing about change and increasing productivity rates.

This study aims to analyse current knowledge management strategies, processes for converting tacit into explicit knowledge, implementation strategies and the contribution of knowledge management to organizational effectiveness and efficiency at eThekweni Municipality. In addition, the study investigates the relationships amongst these dimensions of knowledge management. The study aims to provide recommendations with strategic direction for the improvement of knowledge management initiatives

within eThekweni Municipality's Skills Development and Management Services and Organizational Development Unit.

2 Critical evaluation of literature

Current knowledge management strategies

Knowledge management is an important organizational consideration because it increases the organization's viability, competitive success and performance outcomes (Cabrera & Cabrera, 2002; Dyer & Singh, 1998; Palazzolo et al., 2006; Zhou & Fink, 2003). Trethewey & Corman (2001) link effective knowledge management practices to enhancing creative potential, stating that effective knowledge management systems "may relieve individuals of the burden of 'reinventing the wheel', freeing them to engage in more creative tasks".

Hansen, Nohria & Tierney (1999) argue that there are basically two strategies for managing knowledge. They call these strategies "codification" and "personalisation". The former refers to the codification of knowledge and its storage in databases where it can be accessed and used readily by anyone in the company. Such organizations invest heavily in information computer technology (ICT) for projects like the intranet, data warehousing and data mining, knowledge mapping (identifying where the knowledge is located in the firm), and electronic libraries.

Knowledge creation and dissemination processes

Developing communities of practice (CoPs) is one example of a people-based knowledge management strategy. This theory considers knowledge-as-process, in which relationships among individuals are cultivated to enhance knowledge sharing (Demarest, 1997; Kuhn, 2002). Edvardsson (2003) is of the opinion that the tacit knowledge management process has fewer parts than the explicit one. Although the knowledge creation process is similar in both cases, the main differences lie in the distribution of knowledge. Distribution of tacit knowledge has been most successfully achieved by apprenticeship, communities of practice, dialogues, meetings, informal talks, conferences, lectures and mentorship. The use of knowledge is also similar to that of the explicit one interpreted by McAdam & Reid (2005). Literature clearly outlines techniques and strategies of creation and transferring new explicit knowledge. Nonaka (2004) confirms that explicit knowledge is discovered through combination, wherein the multiple bodies of explicit knowledge (also data or information) are synthesised to create new, more complex sets of explicit knowledge. Through communication, integration and systemization of multiple streams of explicit knowledge, new explicit knowledge is created either incrementally or radically (Nahapiet & Ghoshal, 1998). Existing explicit knowledge, data and information are reconfigured, recategorized and recontextualized to produce new explicit data, information and knowledge embedded in prior proposals may be combined into a new proposal.

Explicit knowledge can be derived from the converted tacit knowledge which is in documents, processes and databases. This is referred to as "decanting the human capital into the structural capital of an organization" (Morey, Maybury & Thuraisinghan, 2002). Furthermore, enhancing tacit knowledge flow through better human interaction will ensure that knowledge is diffused around the organization and not held in the heads of a few employees. Given the fact that knowledge can exist within people, artefacts and organizational entities, it is of utmost importance to capture tacit knowledge from individuals' minds as well as the explicit knowledge from the manual, so that the knowledge can be shared with others.

Current processes for managing knowledge management

Heaton & Taylor (2002) have recently argued that most organizational knowledge is embedded in the processes of CoPs. In CoPs, more sophisticated information sharing can take place because tacit knowledge is not easily transmitted simply through technology. Technology makes differences in local practices and culture within an organization hard to transmit (Swan, Newell, Scarbrough & Hislop, 1999). Embodied, and enculturated ways of knowing are linked to CoPs and the process perspective of knowledge management (Blackler, 1995). According to Fong, Love & Irani (2005), in order for knowledge management to be successful, an organization must have a strategy and individuals must be persuaded to contribute to its formulation and implementation.

Wenger (2004) states that knowledge management is a strategic activity. It starts with strategy and ends with strategy. It connects strategy to performance through knowledge. In order for knowledge management to improve effectiveness and efficiency within a local government environment it needs to be cascaded from the executive management or strategic level. Furthermore, one of the Key Performance Areas (KPA) for executive and operational managers in local government should be knowledge management, which is linked to their performance agreement as well as included in their Personal Development Plans. Performance management identifies who or what delivers the critical performance with respect to the business strategy and objectives (Roberts & Fusfeld, 2001), and ensures that performance is successfully carried out. O'Brien (2005) further says that successful knowledge management creates techniques, technologies, systems and rewards for getting employees to share what they know and to make better use of accumulated workplace and enterprise knowledge. Communities of practice create value by improving the performance of their members when they apply their knowledge in the performance of their job.

Implementation of knowledge management strategies

Evans (2003) stresses the role of human resource managers in helping the organization to develop an organizational culture that supports knowledge building and sharing. The steps necessary in such a transformation process include agreeing on strategic priorities and areas for change, helping to demystify knowledge management by linking knowledge management activity to established business processes and human resource management practices, and engaging others in knowledge management dialogue. In the South African context, Business Process Reengineering (BPR) intervention findings are not taken seriously. These mainly focus on broken business processes with the aim of improving productivity, eliminating waste and promoting organizational development whilst acquiring knowledge.

Maybury & Thuraisingham (2002) discuss two thrusts of strategy of which the first focuses on making known and accessible knowledge that already exists, for example, by sharing best practices. This thrust is best paraphrased as, "if only we knew what we knew"; too frequently, people in one part of an organization reinvent the wheel or fail to solve customer problems because the knowledge they need is elsewhere in the company but not known or accessible to them. The second major thrust of knowledge-focussed strategies is that of innovation – the creation of new knowledge and commercializing it as valuable products and services. This is sometimes referred to as knowledge innovation.

Maybury & Thuraisingham (2002) found that there is no shortage of creativity in organizations. The real challenge is to convert ideas into products and services or improved business processes, doing it faster and better than competitors. Morey, Maybury & Thuraisingham (2002) argue that there are seven levers that organizations commonly use to exploit knowledge: customer knowledge, knowledge in people, knowledge in products, knowledge in processes, organizational memory, knowledge in relationships and knowledge assets.

Perceptions of the impact of knowledge management effectiveness

Companies with a diverse, multicultural workforce tend to rely on workshops to develop knowledge management skills among people from different backgrounds. These training sessions may emphasise ways to shorten the amount of time it takes to solve problems and explore alternative courses of action. However, these sessions usually lack a very important component, which is focusing on building mechanisms for knowledge sharing and converting tacit to explicit knowledge. Diversification of the workforce provides companies with access to different ideas and skills, and enhances the company's competitive edge (Elmuti, 2001). However, management has to provide mechanisms and adjust structural arrangements in order to reap the benefits that accompany a diversified workforce. One may assume that, given that members of different cultures have different kinds of frames of reference, a team composed of members from different cultural backgrounds would be interested in knowing ways of solving problems and sharing knowledge in their own as well as in their host cultures. On the other hand, cultural diversity may impede the sharing of knowledge, as there is a lack of personal compatibility and common language.

Knowledge sharing helps in organizational learning (Ford & Chan, 2003) and the development of domain related skills, a precondition to organizational innovation. Knowledge sharing, which involves the process of disseminating knowledge within the firm, is susceptible to the effects of cultural differences (Ford & Chan, 2003). Trust and common languages and beliefs are critical to effective knowledge sharing

(Simonin, 1999). More specifically, knowledge sharing within heterogeneous cultural groups tends to be difficult, requiring more time and effort than in homogeneous cultural groups (Ford & Chan, 2003). Therefore, management should promote knowledge sharing among formal structures that exhibit a formal reward system and incentives. A commonly used practice entails moving from rewarding individuals to rewarding groups, or devising incentives that promote sharing at both the divisional and firm levels (Watard & Peres-Alvares, 2007).

Research design

Based on the literature review, an exploratory study was designed using a survey approach that addressed the dimensions of knowledge management in terms of processes, strategy implementation and its impact on organizational effectiveness and efficiency within eThekweni Municipality's Skills Development and Management Services and Organizational Development Unit. This study followed a quantitative research approach using descriptive statistics, namely, measures of central tendency and measures of dispersion were used to condense the data into a few summary measures. Inferential statistics using the Pearson Product Moment Correlation was undertaken as a 100% response rate was not achieved.

This exploratory study adopted a census approach, which was considered to be suitable because it was thought to be possible to obtain data from every member of the population of interest (McDaniel & Gates, 1998; Saunders et al., 2003) due to the small employee composition under the ambit of two public service units. From a population size of 80 a sample of 66 respondents correctly completed the administered questionnaires, thereby generating a response rate of 82.5%.

This study used ten participants to whom questionnaires were administered as a pilot and its main intention was to obtain some assessment of the questions' validity and the likely reliability of the data that was considered. The self-administered, closed-ended questionnaire using the Likert scale was designed to assess the key dimensions of knowledge management. It required participants to respond to the items using a five point scale ranging from (1) strongly disagree, (2) disagree, (3) undecided, (4) agree to (5) strongly agree. The self-administered questionnaires were administered during the months of June to July 2009.

3 Empirical analyses

The nature of the study required the researcher to use widely available software such as Microsoft excel and Statistical Packages for Social Scientists (SPSS) version 18.0 for data capturing, analysis and interpretation. Descriptive and inferential statistics were used for data analysis and interpretation. Under the ambit of descriptive statistics, frequencies and percentages were presented in the form of tables.

Furthermore, the psychometric properties of the questionnaire were statistically assessed using Factor Analysis and Cronbach's Coefficient Alpha. A principal component analysis was conducted to generate the initial factors and a principal factor analysis using SPSS and orthogonal varimax rotation was used, which generated four separate factors with latent roots greater than unity (13.13, 18.48% of total variance; 12.91, 18.24% of total variance; 11.69, 16.57% of total variance; 8.50, 8.38% of total variance), which represented the four dimensions of the study. The questionnaire, therefore, validly determines the aforementioned dimensions. In terms of reliability, the Cronbach's Alpha values for individual dimensions were high: current knowledge management strategies (Alpha = 0.878), current processes for managing knowledge management (Alpha = 0.840), implementation of knowledge management strategies (Alpha = 0.889) and perceptions of the impact of knowledge management effectiveness (Alpha = 0.876).

4 Results

The mean score values in this article reflect that on a scale from 1 to 5, respondents were generally below 3. This indicates that a high proportion of responses ranged from strongly disagree/disagree to being undecided about the questions relating to each dimension. This further reflects a negative perception with regard to each of the dimensions relating to these units of eThekweni Municipality. This implies that improvement is needed with regards to knowledge management. A frequency analysis was undertaken and the research findings indicated that 25.8% of the respondents strongly disagreed and 15.2% disagreed that knowledge management incentive systems were satisfactory. Furthermore, 34.8% of the subjects strongly disagreed and 24.2% disagreed on the existence of a knowledge management rewards system

which equated to the effort the employees have contributed to knowledge creation. Moreover, a disproportionately high percentage of 30.3% of the respondents strongly disagreed and 13.6% disagreed that employees are rewarded in groups.

Current processes for managing knowledge is another area for improvement as reflected in the study findings. A frequency analysis was undertaken and the research findings indicate that 13.6% of the respondents strongly disagreed and 16.7% disagreed that these units recategorize and recontextualize existing explicit knowledge, data and information to produce new explicit data, information and knowledge. The research results further indicate that 19.7% strongly disagreed and 22.7% disagreed that these units use mining techniques to uncover new relationships among explicit data that may lead to predictive or categorization models that create new knowledge.

Moreover, 16.7% of the subjects strongly disagreed and 19.7% disagreed that tacit knowledge is captured from individuals' minds. The results also indicate that there is room for improvement in the implementation of knowledge management strategies. This implies that the implementation of knowledge management strategies should be taken into consideration when enhancing team effectiveness. A total of 19.7% of the respondents strongly disagreed and 28.8% disagreed that these units have implementation strategies to convert tacit to explicit knowledge. The research findings indicate that 21% of the respondents strongly disagreed and 27.3% disagreed that these units have knowledge that is codified and stored in databases where it is accessible and readily used by anyone in the organization. Furthermore, the results indicate that 18.2% of employees strongly disagreed and 31.8% disagreed that managers should developed a system that encourages people to write down what they know and to get those documents into the electronic repository.

The employees do not believe (supported by the research findings whereby 21.2% strongly disagreed and 27.3% disagreed) that the level and quality of employees' contributions to the document database and knowledge creation are part of their annual performance measurements (reviews). In addition, in these units the study findings depict a very high percentage of 24.2% of the employees who strongly disagreed and 19.7% who disagreed that there are techniques, technologies, systems and rewards for getting employees to share what they know. Also, the results indicate that there is room for improvement for the perceptions of the impact of knowledge management effectiveness. The research findings show that 16.7% of the respondents strongly disagreed and 13.6% disagreed that employees participate in professional networks that extend beyond organizational boundaries. However, a disproportionately high percentage of 16.7% of the respondents strongly disagreed and 9.1% disagreed that these units apply knowledge assets. Finally, a total percentage of 16.7% of the respondents strongly disagreed and 15.2% disagreed that the role of human capital in these units contributes to the competitive advantage of business in today's knowledge economy.

Inferential statistics

This article indicates that there exist significant and direct correlations amongst the dimensions of knowledge management respectively. The implication is that an improvement in one dimension of knowledge management has the potential to enhance another dimension thereby having a ripple effect.

5 Discussion

Interpretation of the results indicated that there exist significant intercorrelations amongst the dimensions of the study. The descriptive statistics results show a low mean value of 2.98 indicating that there is significant room for improvement in current knowledge management strategies. While there have been inconclusive results in linking the relationship between knowledge management strategies and organizational performance (Choi et al., 2008), there is clearly a relationship between knowledge management strategies and a tendency toward organizations becoming learning centres for managing knowledge dealing with change as competitive exercises that affect survival.

The descriptive statistics results indicate that there is a significant room for improvement for current processes for managing knowledge management with the low mean value of 2.970. A low mean value of 2.75 depicted in the descriptive statistics results implies that there is room for improvement in the implementation of knowledge management strategies. Knowledge construction and creation is a key element of effective knowledge management. The study conducted by McAdam & Reid (2001) looking at SME and large organization perceptions of knowledge management revealed that knowledge transfer,

organizational learning, knowledge capture and dissemination, and organizational knowledge, are considered key elements of knowledge and knowledge management.

The descriptive statistics results indicate that the perceptions of the impact of knowledge management effectiveness with the mean value of 2.99 signify a need for room of improvement. Research was conducted by Lee & Sukoco (2007) into the effects of entrepreneurial orientation and knowledge management capabilities on innovation, competence upgrading and organizational effectiveness among companies in Taiwan listed in the Top 100 firms. This is imperative, as research conducted by Connelly & Kelloway (2003) reveals that knowledge sharing has been identified as a positive force in creating innovative organizations, but the organizational and individual factors that promote or discourage knowledge sharing among colleagues are poorly understood.

6 Conclusion and recommendations

South African public institutions have also adopted the principles of the private sector influenced by the New Public Management (NPM) school of thought. By adopting NPM principles, eThekweni Municipality has the potential to implement successful knowledge management strategies and initiatives. Apart from improvements needed, the municipality is fully resourced and is capable of implementing a customer focussed programme using effective knowledge management strategies.

eThekweni Municipality should develop a comprehensive knowledge management strategy that has both technical and cultural attributes. The performance measurement agreements of all employees should include knowledge management as the strategic focus area during all financial years. Knowledge management must be fully aligned and integrated into the municipality's strategic plans, and units' strategic plans, as well as departments' business plans. Indigenous knowledge through public participation should be elicited and should play a tremendous role in organizational effectiveness. The municipality must invest in human capital with rewards in promoting the transfer of tacit to explicit knowledge which is mainly used for innovation and creativity, which brings about change and a high productivity rate.

The knowledge focus within eThekweni Municipality must be shifted from being on the individual to being integrated into systematic considerations of broader work processes. The municipality must govern knowledge-management-related processes and relationships by providing enterprise-wide support, infrastructure and leadership. Moreover, this municipality must have knowledge management systems designed to collect, disseminate and use project-generated knowledge, for the benefit of the entire organization. Suitable and motivated people should be recruited in order to take an active role in the process of knowledge creation, storing and dissemination. Communities of practice must be established within the municipality as they create value by improving the performance of their members when they apply their knowledge in the performance of their jobs; hence, involving practitioners in knowledge management is also important for bringing back knowledge from the field.

Explicit knowledge within eThekweni Municipality must be conceptualized and stored in information systems and should create knowledge leadership and champions, a well-developed technological infrastructure ("hard") and knowledge enriching culture. Employees should increase their use of the organizational intranet system in order to increase their knowledge. eThekweni Municipality should diversify the workforce in order to provide the organization with access to different ideas and skills, thereby enhancing the organization's competitive edge.

Future research should focus on all units within eThekweni Municipality rather than two small units. It should focus on employees within district and local municipalities throughout KwaZulu-Natal. Since this study only focussed on four dimensions of knowledge management, future research can look at other factors, such as diversity, team building, stakeholder participation, organizational structure, business processes, intellectual capital and communication.

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