

## PERCEPTIONS OF KNOWLEDGE MANAGEMENT: A LOCAL GOVERNMENT PERSPECTIVE

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### Abstract

Public sector institutions are grappling to maintain knowledge management cycle which integrates knowledge into different phases as it also incorporates socialization, externalization, combination and internalization model. Whereas, knowledge management could be used as a strategic tool to advance organizational effectiveness and efficiency whilst accelerating service delivery and achieving operational goals.

This article seeks to address the bottlenecks as far as knowledge management is concerned by using biographical profiles with the view of promoting the creation and management of knowledge within eThekweni Municipality. The study reflects that the biographical profiles of employees (age, education, race, job level) influences their perceptions of the current knowledge management processes and strategies and their implementation and impact on effectiveness.

**Keywords:** Knowledge Management, Local Government, eThekweni Municipality

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### Introduction

The emerging global economy is characterized increasingly by knowledge intensive firms which require diverse and specialized knowledge workers to develop unique knowledge competencies and also to collaborate in ways to create new knowledge that enhances the performance of the organization. Dougherty (1992) and Nonaka (1994) argue that in knowledge intensive firms, competitive advantage and product success are a result of collaborative and ongoing learning. For knowledge management strategies and initiatives to be successful, silos mentality between eThekweni Municipality units had to be eliminated and they should work as teams.

eThekweni municipality promotes teamwork within organizational structures that are lean, flatter and flexible and debureaucratized, despite the fact that it fails to design strategic programs with the view to formulate and implement knowledge management systems, models and initiatives. Technological advancements created by Information Communication Technology (ICT) require employees to be creative and innovative and to record their skills and experiences to be used competitively by newly employed employees. Scarbrough & Swan (2001: 38) argue that the rise and growth of knowledge management is one of the managerial responses to the empirical trends associated with globalization and post industrialism.

The research objectives of the study are to examine the influence of the biographical profiles of employees on current knowledge management strategies, the transfer of tacit to explicit knowledge, knowledge management's contribution to organizational effectiveness and efficiency and, implementation strategies of knowledge management. The author consider the influence of the biographical profiles to be crucial considering the diverse workforces that exist in organizations and believe that a substantial part of knowledge management entails understanding these employees and appropriately managing their knowledge in order to make them more innovative, effective and output orientated. Furthermore, the study aims to provide recommendations with strategic direction and an improvement as far as knowledge management strategies are concerned within the Skills Development and Management Services and Organizational Development Units so that they can drive knowledge management to be effective and efficient in its implementation whilst taking cognizance of the biographical correlates.

### Critical Evaluation of the Literature

The theoretical understanding of organizational knowledge has evolved over the last 50 years. Edvardsson (2003: 1) proclaims key factors in the growth of interest in knowledge management in the 1990s which was the rediscovery that employees

have skills and knowledge that are not available to, or captured by, the organization.

Drawing on the views of various authors, knowledge management is defined as the process of acquiring, identifying, locating or creating, capturing or retrieving, storing, transferring, disseminating knowledge within and between organizations and, the management of its use (Alavi & Leidner, 2001; Bennett & Gabriel, 1999; Darroch, 2003).

In the public service, knowledge is acquired from stakeholders who include communities, the three tiers of government, civil servants, civil society and the private sector. Wiig (2002: 228) indicates that the conceptual leadership of knowledge management must in part reside within public administration but must also be shared with all stakeholders. In order to achieve this, it is imperative to evaluate current knowledge management strategies, current processes for managing knowledge, implementation of knowledge management strategies, perceptions of the impact of knowledge management on effectiveness and the influence of the biographical profiles of managers involved in the process.

### **Current knowledge management strategies**

At the same time, knowledge management (KM) is recognized as the fundamental activity for obtaining, growing and sustaining intellectual capital in organizations (Marr & Schiuma, 2001, p. 49). This means that the successful management of intellectual capital is closely linked to the knowledge management processes an organization has in place which in turn implies that the successful implementation and usage of knowledge management ensures the acquisition and growth of intellectual capital.

During human resource information system implementation, companies become a drastic tool for knowledge management created in the 21<sup>st</sup> century. Knowledge management can be viewed as three levels of techniques, technologies and systems that promote the collection, organization, access, sharing and use of workplace and enterprise knowledge. The most fundamental and common classification of organizational knowledge is along the explicit-tacit dimension. Explicit knowledge is data, documents, things written down or stored on computers whilst tacit knowledge is the “how-to” of knowledge which resides in workers (O’Brien, 2005: 56) such as insights, intuition, beliefs, personal skills and craft and using rule-of-thumb to solve complex problems (Chua, 2002; Daft, 2001; Hunter, Beaumont & Lee, 2002).

### **Current processes for managing knowledge**

Von Krogh, Roos & Slocum (1994:234) introduce the concept of corporate epistemology as the theory of how and why organizations gain knowledge and how they believe this knowledge is developed. Accepting this concept of corporate epistemology we deduce that in order for knowledge management initiatives to be successful, there has to be alignment between the epistemologies of individuals and the corporate epistemology within which these individuals are to operate.

Ingrained into the process of knowledge management is the so-called knowledge cycle. This cycle integrates knowledge through four main phases which are knowledge acquisition, knowledge creation, knowledge transfer and knowledge utilisation and application in various environments, which should be observed interactively rather than by a linear approach (OECD, 2000:65).

Fong, Love and Irani (2005: 6), cited in Nonaka & Takeuchi (1995), state that the Socialisation-Externalisation-Combination-Internalisation (SECI) model can be included as part of the knowledge management cycle. Similarly, literature reveals the integration of multiple streams for the creation of new knowledge through the mechanism of socialisation which causes tacit knowledge. Nonaka (1994, p. 65) defines socialisation as the synthesis of tacit knowledge across individuals, usually through joint activities instead of written or verbal instructions. In a local government environment, socialisation can be promoted by diversified knowledge workers within the organization (during meetings and workshops, trainings) and outside the organization (during community meetings and dialogues) with the aim of combining it to create explicit knowledge.

### **Implementation of knowledge management strategies**

According to Becker, Huselid & Ulrich (2001), human resource management's contribution to value creation is a firm's strategy based on people as a source of competitive advantage, and a firm's culture to share those values. The key to success is to ensure that the firm can attract and maintain knowledge workers through appropriate human resource management practices. According to McFarlane (2008:6), the management of the knowledge workers in today's organization and society, where there are increased educational and learning opportunities, requires organizational leaders and policy planners to rethink and redefine their roles as “knowledge leaders” whose very duties and responsibilities are to develop a system of participative knowledge sharing in attempting to solve organizational problems, accomplish the mission, vision and critical tasks, manage effectively and survive crises and change.

### ***Employee perceptions of knowledge management effectiveness***

Diversification of the workforce provides companies with access to different ideas, skills, and it enhances the companies' competitive edge (Elmuti, 2001:45). 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 the way 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. 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.

In order to both take advantage of a diverse workforce and to allow employees to perform at their full capacities, managers should promote a cultural environment that is responsive to the employees' specific cultural needs (Elmuti, 2001: 44). Organizations need to put in place multicultural communication tools to overcome language and cultural barriers. In fact, the cultural trait of not being outspoken, for example, can be remedied by a collaboration system that includes anonymous features, which are useful for idea generation and feedback.

The effective management of a firm's knowledge assets is an essential factor to achieve a sustainable competitive advantage in today's market (Drucker, 2001:33). However, knowledge sharing is susceptible to the effects of cultural differences (Ford & Chan, 2003: 14). Trust, 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: 33).

### ***Influence of biographical variables on the dimensions of knowledge management***

The influence of age, gender, education, race and job level on the dimensions of knowledge management are being assessed as it is postulated that these biographical variables have the potential to affect perceptions of current knowledge management strategies, current process for managing knowledge management and to convert tacit into explicit knowledge, the implementation of knowledge management strategies and the impact of knowledge management effectiveness respectively. Researchers

have also noted the influence of age (Connelly & Kelloway, 2003; Organ & Ryan, 1995), gender and tenure (Connelly & Kelloway, 2003) on knowledge sharing and the impact of education on new knowledge and existing knowledge (Egbu, 2004; Inkpen, 1996; Van den Börsch, 1999). Whilst many of these biographical influences have been noted in studies indirectly relating to knowledge management, this study aims to assess these direct influences statistically.

### ***Research Methodology***

A quantitative data was collected using self-developed questionnaires and analyzed using descriptive and inferential statistics. The questionnaire was analyzed statistically using Statistical Packages for Social Sciences (SPSS) version 18.0.

### ***Research participants***

This study adopted a census approach whereby data was obtained from every employee of the Skills Development and Management Services and Organizational Development Units which was feasible as the units have less than 100 employees. From a population of 80 employees, sixty six (66) respondents correctly completed the personally administered questionnaires thereby generating a response rate of 82.5%. In terms of age, 13.6% of the respondents were 18-24 years, 34.8 were 25-34 years, 25.9% were 35-44 years, 21.2% were 45-54 years and 4.5% were 55 years and above. Males constituted 51.5% of the sample whilst 48.5% were females, thereby depicting a more or less equitable representation of gender in these units. In terms of education, there were a disproportionately high percentage of respondents (40.9%) with diplomas while 33.3% had degrees, 10.6% held a trade certificate, 9.1% had just a matriculation and 6.1% had below a matriculation. In addition, 78.8% of the respondents were Black while 9.1% were White, 7.6% were Indian and 4.5% were Coloured employees, thereby reflecting that these units may not be diversified enough for purposes of knowledge creation and the implementation of knowledge management strategies. In terms of tenure, 63.6% of the respondents have been employed for 0-5 years, 15.2% are employed for 6-10 years, 9.1% for 11-15 years and 12.1% have over 20 years of service. Furthermore, 65.2% of the respondents occupy non-managerial posts while 16.7% are at junior management, 12% are at middle management and 6.1% at senior management levels.

### ***Measuring instruments***

The self-developed, closed-ended questionnaire comprised of two sections. Section A used a nominal

scale and comprised of option categories to choose from per biographical variable (age, gender, education, race, tenure and job level). Section B measured the sub-dimensions of knowledge management which were assessed using a 1 to 5 point Likert scale ranging from strongly disagree (1) to strongly agree (5). Appropriate questions were designed based on the challenges, gaps and recurring themes that surfaced while reviewing the literature on knowledge management.

### **Research procedure**

A pilot test was conducted by administering the questionnaire to 10 participants and its main intention was to obtain some assessment of the questions' validity. The results of the pilot study confirmed that the items were appropriate, and adhered to the principles of wording and measurement. Thereafter, the self-administered questionnaires were administered over a two month time period.

### **Statistical analyses**

Descriptive statistics (frequencies, percentages, measures of central tendency and dispersion) and inferential statistics (t-test and ANOVA) were used to analyse the results of the study which were processed using Statistical Packages for Social Scientists (SPSS).

Furthermore, the psychometric properties of the questionnaire were statistically assessed using Factor analysis and Cronbach's coefficient Alpha respectively. The Factor Analysis generated four separate factors with latent roots greater than unity, which represented the four dimensions of the study. The questionnaire, therefore, validly determines the aforementioned dimensions. The overall Cronbach's Coefficient Alpha is 0.953 which depicts a high level of internal consistency of items. The Cronbach's Alpha values for individual dimensions were also 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).

## **Results**

### **Descriptive statistics**

The subjects were required to respond to the items relating to the key dimensions of the study using a 1-5 point Likert scale. The mean score values of the descriptive statistics reveals that on a scale from 1 to 5, respondents generally were 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 regards to each of the dimensions relating to the knowledge management within these units of the eThekweni municipality. This implies that improvement is needed with regards to knowledge management.

### **Inferential statistics**

Managers differing in biographical profiles differ in the perceptions of the key dimensions of knowledge management respectively. This study indicates that there is a significant difference in the perception of employees varying in age regarding the implementation of knowledge management strategies at the 5% level of significance. In order to assess exactly where the differences lie, mean differences were assessed and it was found that employees between the ages of 55-64 years held more positive views of the implementation of knowledge management than all other employees, especially those between 45-54 years who had the most negative views.

This study indicates that there is a significant difference in the perception of employees varying in education regarding the implementation of knowledge management strategies and perceptions of the impact of knowledge management effectiveness at the 5% and 1% levels of significance respectively. In order to assess exactly where the differences lie, mean differences were assessed and it was found under the education category that employees with diplomas had the highest mean score value of 3.10 thereby reflecting the view that knowledge management strategies are implemented in these units. However, employees with degrees held the most negative impression of the implementation of knowledge management strategies in these units. The study findings found that senior managers (Mean = 3.78) were most in agreement that knowledge impacts on the unit's effectiveness, contrary to the beliefs of middle managers (Mean = 2.56).

### **Discussion**

Analyses of the data indicate that there was a significant difference in the perception of employees varying in age regarding the implementation of knowledge management strategies. Employees' ages and career stage may also affect their knowledge sharing behaviours through the size and utility of their social networks; experienced employees may simply be more able to share their knowledge because they know more of the right people in the organization (Organ and Ryan, 1995:8).

The analyses of the results show that there is no significant difference in the perception of male and female employees regarding each of the key dimensions of knowledge management respectively. However, according to Organ and Ryan (1995: 8),

gender was not found to be a significant predictor of organizational citizenship behaviour, but given gender's influence on communication styles, it is not unreasonable to wonder if it would also affect knowledge sharing.

The analysis of the data provides evidence that there is a significant difference in the perception of employees varying in education regarding the implementation of knowledge management strategies and perceptions of the impact of knowledge management effectiveness respectively.

It means that organizations should encourage their members to update their existing knowledge to develop new competencies that will be beneficial to them.

Research results of this study reflected that there is a significant difference in the perception of employees varying in race regarding the current knowledge management strategies and implementation of knowledge management strategies respectively. Thomas and Bendixen (2000:12) make a valuable prediction that "the challenge facing South Africa today is for managers to harness the richness of the many ethnic groups so as to enhance productivity and facilitate global competitiveness. This demands an understanding of ethnic values and how they impact on global competitiveness".

Research results of this study reflected that there was no significant difference in the perception of employees varying in tenure regarding the knowledge management dimensions.

Kelloway & Barling (1999:12) have suggested that transformational leadership may be a potential predictor of knowledge use in organizations. Tests of significance indicated that there is a significance difference in the perception of employees varying in job level regarding perceptions of the impact of knowledge management. The interpretation of the results indicated that employees differing in biographical profiles (age, education, race) differ in the perceptions of the implementation of knowledge management strategies, those differing in race differ in their perceptions of current knowledge management strategies and those varying in education and job level differ in their perception of the impact of knowledge management effectiveness.

## **Recommendations**

This study aims to provide recommendations for the organization with regard to the significant findings of this study. It is therefore, recommended that Thekwini Municipality should avoid the decay of their knowledge stocks at the individual level (human capital) by striving to make knowledge, skills, and capabilities more valuable and/or unique. The municipality should employ young people as they can acclimatize easily working in groups and are mostly involved in social networks (internet) including

network structures that are most effective for facilitating knowledge sharing outside of the group.

Furthermore, eThekwini Municipality should emphasize that in order to enhance knowledge sharing, employees with an appreciation of others' perspectives have to be preferred, and they should encourage the use of lateral career movement by employees in order to develop the necessary appreciation of others' perspectives. This organization should invest in the constant training and development of employees to contribute to knowledge management processes.

To curb more negative views regarding knowledge management strategies amongst minority groups, eThekwini Municipality should promote the diversification of the workforce in order to have access to different ideas and skills as it enhances the companies' competitive edge. Furthermore, to promote a cultural environment that is responsive to the employees' specific cultural needs and should put in place multicultural communication tools to overcome language and cultural barriers. The municipality should guide the radical cultural change for knowledge creation and knowledge sharing of all employees and introduce workshops to promote the identification of commonalities and differences with the aim of promoting knowledge management components through diversity.

eThekwini Municipality should formulate a retention strategy for the employees with knowledge to stay within the organization up to retirement age and beyond (where possible) in order to impart knowledge acquired to newly inexperienced employees. Moreover, the council should implement a sophisticated but easy to use, new knowledge sharing software so that managers can find more ways to demonstrate their support to employees who share their knowledge and cascade activities down to operational level.

## **Conclusion**

The study reflects that the biographical profiles of employees influence their perceptions of the current knowledge management processes and strategies and their implementation and impact on effectiveness. The influence of age emphasizes that it is imperative to avoid the decay of employees' knowledge stocks at the individual level by striving to make knowledge, skills and capabilities more valuable, unique and available. The impact of various biographical variables to knowledge management reinforces a need of new career management strategies and the diversification of the workforce with the view to enhance knowledge creation within the eThekwini Municipality. In order for knowledge management to be effective it should cascade from executive management down to operational level. The significant relationship between biographical variables and knowledge management dimensions

mandate public sector organisations to promote knowledge creation and sharing culture which is associated with compensation strategies.

Barriers and limitations were present in the research design and during the data collection phase of the research process whereby resistance was met from senior management to access information. It is suggested that future research assesses whether managers can best encourage their employees to share knowledge with each other by acting as a role model, by rewarding desired behaviour, or with charismatic persuasion.

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