

Exploring the Role of Knowledge Management in Improving Service Operations – The Case of the Select Departments in the City of Johannesburg, South Africa

W B Mothamaha, KK Govender

Regenesys Business School

Johannesburg, South Africa

krishnag@regenesys.co.za

Abstract: *In the recent past the City of Johannesburg faced sporadic and sometimes violent demonstrations by citizens who demanded better service. This study explored whether knowledge management (KM) could assist in improving service delivery in the Public Health Section, City Parks, Department of Social Development, Rea Vaya and Joburg Innovation and Knowledge Exchange in the City of Johannesburg. The snowball sampling technique was used to gather information by firstly identifying three key persons who were employed in service delivery and knowledge management, who then assisted in identifying other people who met the criteria for participation in the study. It became apparent that the implementation of knowledge management initiatives resulted in best-practices being shared, institutional memory was preserved, and learning among staff was promoted. Furthermore, knowledge sharing and knowledge management in general ultimately resulted in quicker and more effective decisions, and most of all results in savings in transaction costs. It was concluded that sine KM improved service delivery in the organizations investigated, it could be used throughout public service organizations to improve services, especially when technology is used optimally.*

Keywords: *Municipal service delivery; service operations; knowledge manage.*

1. INTRODUCTION

The City of Johannesburg appointed a new CEO in December 1998 to rescue the city from what commentators declared as ‘near bankruptcy.’ By December 1998, Johannesburg’s glitter was tarnished by capital flight and a decade of bad management (Khan, 2000).

At the time of the appointment of the new CEO, the city was faced with a R 400 million overdraft (Khan, 2000). The city needed a strategy to rejuvenate itself, and chart a new growth and development plan. The city adopted a three year strategy called ‘Igoli 2002’ which started in 1999, which imposed a ‘belt-tightening’ budget in which all capital expenditure was frozen. The new CEO adopted a World Bank model which pins its hopes on the private sector (Khan, 2000). The municipality then formed ten companies owned by the city called Municipal Owned Entities (MOEs) which would be independent, but report to a political head. The MOEs were responsible for service delivery and to generate revenue for the municipality. Staff was transferred to the MOEs which were to be run like private companies, and the understanding was that the municipality will initially sponsor these companies and once they are fully functional, they would fund themselves and generate revenue for the city.

Before adoption of this new strategy, the city was organized into four municipal substructures known as Northern, Southern, Eastern and Western Metropolitan Local Council, and each had its own mayor as the political head, and a director who led a team of top manager. Furthermore, revenue collection and service delivery were centrally managed by the substructure.

The new strategy amalgamated the four metropolitan local councils into one council with one executive mayor, as the political head. The new strategy which is encapsulated in the Growth and Development Strategy for Johannesburg (2006) managed to move the city out of bankruptcy and by the year 2002, the city started to make profit. Representatives from other cities and towns within South Africa and outside the country, came to the City of Johannesburg to learn about how

the city managed to take itself out of bankruptcy. The city realized how valuable its experience was and therefore formed a unit for knowledge management and innovation called Joburg Innovation and Knowledge Exchange (JIKE).

JIKE is a unit within the Office of the Chief Information Officer (OCIO) of the City of Johannesburg and its mandate is to ensure the practice and promotion of effective knowledge management and innovation within the COJ's Enterprise Knowledge Management Strategy, (2010-2011). According to the aforementioned strategy, JIKE will:

- Identify, consolidate, structure and disseminate the City's strategic knowledge;
- Provide support to key groupings in their decision-making and strategy formulation process through provision of timely relevant knowledge;
- Encourage and facilitate knowledge sharing across functions, departments and municipal-owned-entities, that will assist with the achievement of broader goals and targets of the city as outlined in the GDS and Integrated Development Plan(IDP);
- Support cooperative governance efforts through sharing and exchanging knowledge;
- Support external knowledge sharing initiatives with other municipalities and partners such as South African Cities Network (SACN), and the South African Local Government Association (SALGA) and,
- Identify, nurture and develop innovation within the city in pursuit of better and improved service delivery.

Currently the financial position of the city is healthy, and service delivery has dramatically improved (Khan, 2000). What is not certain is whether the introduction of knowledge management has contributed to improved service delivery through improvement in the service operations. In the light of the aforementioned, this study explored whether knowledge management improves service delivery. The objectives of this research were to understand the role of KM in improving service operations of specific public service units in the COJ, understand the role of KM in the public sector; and to make recommendations on how KM could improve service delivery.

2. LITERATURE REVIEW

Knowledge management, which appears to offer a highly desirable alternative to failed TQM and business process re-engineering initiatives, has become big business for such major international consulting firms as Ernst & Young, Arthur Andersen, and Booz-Allen & Hamilton. In addition, a number of professional organizations such as the American Productivity and Quality Council (APQC) and American Society for Information Science (ASIS) which are interested in areas such as benchmarking, best practices, risk management, and change management are exploring the relationship of knowledge management to their areas of special expertise .

The public sector in South Africa was influence by the created sectoral network within the Department of Public Services and Administration (DPSA) aimed at enhancing the ideal of a client-centered public sector, namely, the "Batho Pele" network.¹ The South African government thus endorsed the ideal of a client-centered public service and consequently, the establishment of various initiatives to create a client-centered culture.

By the mid 1990's, the South African public sector was also influenced by the international public-sector reform strategies emanating from New Public Management (NPM) theory and practices (Miller, 2005:11). NPM principles and practices place emphasis on performance in the public sector particularly, in relation to budget parameters and financial efficiency (Lane, 2000:27; Sarker, 2006:184). Although many governments embraced the NPM approach to service delivery others were critical, and the relevance and appropriateness of NPM reform strategies to the public sector in developing countries was questioned particularly in terms of political and institutional capacity to introduce these strategies (Sarker 2006). The South African public sector

¹ Batho Pele is a Sesotho word for "people first".

is faced with chronic skills shortages and learning networks will not bridge the skills shortage gap but will be instrumental in facilitating a comprehensive shared understanding of the developmental challenges as well as enable a process of benchmarking.

There is relatively little information on knowledge management relating to public sector. Examples of studies done in public organisations include benchmarking of knowledge management (Syed-Ikhsan and Rowland, 2004), knowledge sharing (Liebowitz and Chen, 2003), knowledge management initiatives (Shields et al., 2000) and knowledge management practices, particularly in decision making and situation handling (Wiig, 2002). In an empirical study in a public organisation in Malaysia, Syed-Ikhsan and Rowland (2004) investigated the availability of a knowledge management strategy in the Ministry of Entrepreneur Development of Malaysia. The aforementioned researchers also studied the perceptions on benefits, problems, responsibilities and technological aspects that are entailed in managing knowledge in an organisation. Their study revealed that currently, the Ministry does not have any specific knowledge management strategy, but that knowledge was available and embedded in the Ministry's Procedures and Policies, Job Manual Procedure, Desk File, work flow and databases. The other relevant conclusions were that most of the employees still felt that the head of the Ministry or heads of the divisions/units were the ones who were responsible for managing knowledge in the Ministry. Only 48.3 percent felt that the responsibility to manage knowledge in the Ministry should be everyone's job.

Liebowitz and Chen (2003) conducted another study on knowledge management matters in public sector organizations, by investigating how knowledge management could build and nurture a knowledge sharing culture in an organisation. They found that knowledge sharing in government has some unique challenges and they discovered that government agencies are typically hierarchical and bureaucratic organisations that make sharing of knowledge difficult. Liebowitz and Chen (2003) argue that most people seem reluctant to share knowledge because they subscribe to the paradigm which says that knowledge is power.

Another study on knowledge management in public sector organisations was carried out by Shield et al. (2000) from Carleton University in Canada. The aforementioned researchers attempted to analyze knowledge management initiatives in the Canadian Federal Services and the impact of the knowledge-based economy on work in the public services. The main findings was that knowledge and information initiatives are inherently political and have an uneven impact on different civil servants and on different client groups and members of the public.

Wiig (2002) also undertook made a comprehensive study of knowledge management in public administration by investigating how knowledge management could play an important role in four main areas, namely, enhancing decision making within public services, building competitive social intellectual capital capabilities; aiding the public in participating effectively in decision making; and develop a knowledge management work force. The aforementioned researcher argued that it is important to have comprehensive knowledge management within and in support of public administration, since having such an approach will allow "the society to prosper and increase its viability by making its people and institutions work smarter" (Wiig, 2002:238).

In general knowledge management concentrates on people, processes and technology, all of which are expected to improve as a result of the implementation of effective KM initiatives. People are important in KM because most of the knowledge of an organization rests with the individuals. Knowledge sharing improves the performance of the members in the workplace, thus sharing of knowledge among members of the organization is encouraged. Processes determine how the work will be carried on. If processes improve, then performance and output is expected to improve. KM initiatives are expected to improve processes within an organization, and technology is an enabler of knowledge management. With the right technology, knowledge management can be performed faster with little resource.

In light of the brief literature reviewed, this study was conducted in select service units of the City of Johannesburg, which is a world-class African city in South Africa.

3. RESEARCH METHODOLOGY

The study used a qualitative research because the population studied was small and concentrated within one geographical area, which enabled the researchers to interact with the subjects in their natural setting – working environment. The research was a case study as defined by Powell and Connaway (2004), namely a case study is a specific type of qualitative research in which in-depth data is gathered about a specific phenomenon within its real-life context over a period of time.

Although there are several data collection techniques available in a case study, inter-alia, documents, archival records, interviews, participants' observation, direct observation and artifacts, archival records and artifacts were not used because the knowledge management unit in the COJ is relatively new and there are no archival materials.

The researchers scrutinized the COJ documents such as Joburg 2040: Growth and Development Strategy, City of Johannesburg Case Studies 2011 – 2012, COJ Enterprise Knowledge Management Strategy 2010 – 2011, etc.

Interviews were also used to obtain detailed, in-depth information from people who are knowledgeable about events, processes and environments. The researchers also chose the interview technique because it allows for interaction with people who are actively involved in doing the work, thus getting their perspective on knowledge management and service delivery. Ordinary workers, together the leading figures from JIKE were interviewed, including the knowledge Champions who are individuals selected or appointed from each department or MOE to deal with knowledge management.

4. SAMPLING

The study used non-probability sampling, more specifically, snowball sampling was used, and only people who worked with knowledge management, either in strategy or policy evaluation or service delivery related knowledge work were included in the sample frame. Three people who met the criteria had been identified, and these persons assisted the researchers to identify other workers who met the requirement to participate in the study. This process was supposed to continue until a total of twelve people have been interviewed. However, due to lack of cooperation only six people were finally interviewed. This technique was chosen because knowledge management as a discipline is relatively new, and some people who manage knowledge are not fully aware that they are involved in knowledge management. It is only after explanation during the interviews that they realized that they are doing knowledge management, and were able to recommend other people who did similar work.

A set of questions was prepared prior the interview, and senior managers were asked questions related to the development evolution of the strategy and policy, and the champions were asked questions related to knowledge management and service delivery. The reason being that champions are more inclined to know service delivery issues because they are performing their departmental duties and, also responsible for knowledge management in their departments or MOEs.

5. FINDINGS

5.1. Public Health Section - COJ

The findings revealed that the Public Health section uses the District Health Information System (DHIS) to collect information from each of the eight regions it is responsible for. Through the DHIS system, data is collected manually from each clinic in a region and sent to the centrally based clerks who collate it electronically. The information is categorized into three sections namely; HIV/AIDS, TB and measles, and collated separately in each region and analyzed. The regions then send the collated information to the citywide office for further analysis. Each region is allowed to add information which it deems relevant and necessary.

The regions are able to share information and best practices in a strategic meeting which is held every two weeks. Only the director and deputy-directors participate in these meetings, since most of the information shared is operational especially on the set targets. The information generated is sent to the provincial and national government, and is also supplied to universities and other research institutions, upon request.

Some individuals within the health department suggest the use of ‘patients based’ electronic systems to replace the current manual one, since the electronic system, will allow the doctor to capture information of each patient and send it directly to the regional database for analysis. This system will make clerks to become more productive and it will also reduce the time taken to process information. Those who oppose the system argue that it will divide the doctor’s concentration, as the doctor who is supposed to concentrate on the patient would instead be capturing information. This would result in a doctor spending more time per patient, resulting in long waiting queues, which impact negatively on service delivery.

According to the Director of Public Health in the City of Johannesburg, information sharing and knowledge transfer has the following advantages; it forces people to make the right actions, it decreases doubts, builds confidence, makes people to be more competent, makes people to be aware of processes and challenges, make them accountable, produce better output and make people to identify with the mission and vision of the organization. Although the aforementioned director could not produce quantifiable evidence, he stated that all these ultimately results in improved service delivery.

6. CITY PARKS

The society, especially the previously disadvantage communities had benefited a great deal from the improvements made by City Parks. It emerged that one of the key factors in the success of City Parks is the value they placed on knowledge. The company employed a Knowledge Manager and staff is organized into work committees where experienced and less experienced staff interact and transfer their knowledge. Furthermore, workers who are about to leave the company are interviewed and their feedback is recorded to ensure that institutional memory does not leave the company when these people retire or resign.

Knowledge sharing among the regions of City Parks takes place albeit uncoordinated, and it is for this reason that a knowledge manager was employed. Knowledge management as a discipline within City Parks like other departments in the city is still at its nascent stage, but the Executive Manager – Strategic Support believes that knowledge sharing makes decisions to be efficient and faster, preserve institutional memory, promotes learning between staff, keeps everybody up to date, drives the vision of the organisation, and most of all, saves money especially transaction cost. He further said that knowledge sharing happens between departments within the city which he referred to as “cross pollination of ideas”. He however, raised objection of sharing knowledge with competitors. The company uses SharePoint – a Microsoft program which allows for capturing and sharing of information.

7. DEPARTMENT OF SOCIAL DEVELOPMENT

The department acquires its knowledge through the research it conducts or commissions, and through the census carried out by either the local or national department. Forums such as women, youth, children and service providers’ forums and focus groups are also used to acquire and disseminate knowledge. Staff road-shows are another tool used to share knowledge among the Social Development Department’s staff. Regional Coordinators have their forum which meets regularly to share best practices. People who are about to leave the organisation through natural attrition or resignation are required to fill-in Standard Operation Procedures form and are interviewed to ensure that the knowledge they acquired during their employ does not leave the organization with them when they resign. In this way, they are able to record processes and procedures which they follow in performing their tasks. At a managerial level mentoring and coaching takes, especially of newly deployed staff.

With all the above in place, the Director of Policy Development in the Social Development Department of the city says sharing of knowledge has resulted in; best practices have been shared, programme design is faster, focus has improved, workers have stopped making mistakes, people now concentrate on what works for the client, and all of the aforementioned has generally improved service delivery.

8. REA VAYA

There was a great deal of knowledge acquisition and sharing prior to the implementation of Rea Vaya, and this information sharing continues with the operation of the bus service. During the operation, a high-tech control room monitors the buses and stations, ensuring that Rea Vaya matches world-class standards. The control room has real-time tracking of bus movements and staff can communicate with each driver. This ensures that buses run on time, and quick solutions are found when problems arise. The company does not lose revenue and passengers do not suffer because of delays in resolving the service problem. This has resulted in notable success of Rea Vaya.

The company has placed knowledge management high on their agenda and has hired a Knowledge Management Officer (KMO) to manage its knowledge. Every month the KMO collects information from the directors, packages and disseminates it to the relevant sections and also stores it in the company's repositories. Knowledge acquisition and sharing takes place through story-telling, video-taping, processing of available document and knowledge sharing in the chart café. The KMO is also responsible for sharing knowledge with other municipalities and universities. Although she could not produce evidence to support her statement, the KMO indicated that knowledge management has resulted in cost saving and improved service delivery.

9. JOBURG INNOVATION AND KNOWLEDGE EXCHANGE (JIKE)

The City of Johannesburg is poised to become a knowledge-based organisation and intends to ultimately achieve organisational effectiveness through the use of knowledge management. Through JIKE, it has devised an explicit KM strategy which is derived from the city's 2040 Growth and Development Strategy and its IDP. The KM enablers, namely, organisational culture, human resource, organisational structure, information technology, leadership and strategy are present at the municipality, but what is required is to identify the key aspects of these enablers that need to be developed in order to make them more beneficial to the organization. The KM strategy is used as a plan to highlight the organisation's goals in terms of KM. However, this strategy has not yet filtered through to the structures of the organisation.

The city's Knowledge Management and Innovation section has built an organisational memory also known as a knowledge repository, where departments and MOEs can post knowledge of a strategic nature. This knowledge is supposed to be used mainly in strategy or policy formulation. The assistant manager of JIKE argued that with the establishment of JIKE repository, strategy and policy formulation should be quicker and the quality of policy and strategy should have improved. His assertion is based on the abundance of information and knowledge the policy formulators can have access to before formulating the policy or strategy.

Each department and MOE is encouraged to build its departmental memory where the department or MOE can pool and streamline the entire department's reports and documents, especially those on best practices, lessons learned, processes and technical aspects of their work. These documents would be made available electronically and should be easily accessible from a single point of access. To establish a successful knowledge repository, it is essential to learn how to locate knowledge, and strategically place it in the organisation to be available when needed.

JIKE has also established a forum for knowledge champions to encourage knowledge sharing and management within the city. According to the COJ Enterprise Knowledge Management Strategy 2010 -2011 (n.d.:13) knowledge champions (also known as knowledge activists, coordinators, steward, or representatives) are important, since their role entails distributing KM messages and activities consistently across the organisation. Through Jozinet – the city's portal JIKE encourages employees to submit innovative ideas that are aimed at improving the organization's performance.

Despite all the aforementioned efforts, the city is still far away from reaching the culture of knowledge sharing, since employees, especially older generation still subscribe to the notion that "knowledge is power" and are hence reluctant to share their knowledge. The COJ shares knowledge with other cities and towns within South Africa, and other cities around the African continent. In October 2013 the City of Johannesburg hosted two municipal delegations through its Innovation and Knowledge Unit.

10. CONCLUSION

The City of Johannesburg has established JIKE with the aim of introducing a culture of innovation and KM within the city with the intention that innovation and KM will assist in improving service delivery in the entire city. Previously, staff especially older managers, subscribed to the notion that “knowledge is power” hence they were reluctant to share their knowledge. That notion still exists especially among older generation of senior officials, and when they retire, the institutional memory is lost.

However, departments are gradually beginning to embrace KM and some departments have recruited KMs or assigned people to deal with KM issues within their departments, and these people also serve in the knowledge champions’ forum. The City Parks, City Power, Department of Transport (Rea Vaya) and Group Finance are some of the department who have hired knowledge managers.

The objective of the study was to explore whether KM indeed improved service delivery in the Public Health Section, City Parks, Department of Social Development and Rea Vaya. The exploratory study revealed that KM results in improved service delivery in all the above mentioned service operations. However, technology is not used optimally in the Public Health Section and in Rea Vaya, especially when it comes to data/report collection and information processing. Technology can speed-up processes, introduce efficiency and save costs. City Parks demonstrated this by using SharePoint in its operation and realized efficient service delivery and at lower costs.

Although KM concerns itself with “people”, “processes” and “technology,” people are important key because they are the custodians of knowledge which must be shared or stored. With efficient KM initiatives, all three improve, which results in improved service delivery as has happened at City Parks, which is highly rated in service delivery within the COJ.

If the COJ can implement KM initiatives properly the following benefits can be realized; firstly, employees can transfer and share knowledge among themselves which could result in effectiveness within the municipality. Secondly, improving, developing or updating the existing knowledge repositories or establishing new ones make the existing knowledge within the boundaries of the organisation accessible and protected. Thirdly, relying on knowledge to inform decisions and policies would increase the likelihood of their success and achieving the desired outcomes, and would make the decision-making process transparent and coherent. This is in-line with ‘Batho Pele’ principles which seek to make the government transparent. Fourthly, increased responsiveness and engagement in partnerships with the public the public sector will ultimately lead to both higher returns on taxpayer’s money and better service delivery.

11. RECOMMENDATIONS

The Departments and MOEs should monitor their performance before the establishment of knowledge management and thereafter, to justify the appointment of a KM. Of critical importance is the financial justification and other quantifiable evidence. In this way, a KM governance policy will serve not only as the framework for the scrutiny and management of KM processes, but also as a means to gauge the effectiveness of the KM strategy. Furthermore, the Departments and MOEs should be encouraged to use more relevant and updated technology in managing knowledge, since technology is one of the important enablers of KM, and if used correctly and optimally it can result in efficient service delivery. Other departments and MOEs can use SharePoint as it is used by City Parks. There are however many more software programmes which could be considered. The Innovation and Knowledge Management section should monitor whether the KM strategy is resulting in organisational cultural change, especially developing a knowledge sharing culture, since there is no use continuing with a strategy if it does not produce the required results.

The city should also try and establish whether the knowledge shared with other cities worked for them, as this will increase confidence in the processes employed and give room for improvement were necessary.

REFERENCES

- Anon. 2006. The growth and development strategy for Johannesburg.
- Anon. 2010. COJ Enterprise knowledge management strategy 2010 – 2011.
- Colorado State University. 1993. Types of Case Study. Available from <http://writing.colostate.edu> (Accessed 10 July 2013).
- Khan, F. 2000. South Africa: Igoli 2002 – is the future private. Greenleft Weekly.
- Lane, J. 2000. New public management. London: Routledge.
- Liebowitz, J. 1999. Knowledge Management handbook, Boca Raton: CRC Press.
- Miller, K. 2005. Public sector reform: Governance in South Africa. England: Ashgate.
- Powell, R.R., & Connaway, L.S. 2004. Basic Research Methods for Librarians, 4th edition. Westport, CT: Libraries Unlimited.
- Sarke, A.E. 2006. New public management in developing countries: International Journal of Public Sector Management, 19(2):180-203.
- Syed-Ikhsan, S.O.S & Rowland, F., 2004b, 'KM in a public organization: A study on the relationship between organizational elements and the performance of knowledge transfer', Journal of Knowledge Management 8(2): 95–111.
- Wiig, K.M. 2002. Knowledge management in public administration, Journal of Knowledge Management, 6(3): 224 – 239.