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# Knowledge Management within the Government Communication and Information System (GCIS)

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# Knowledge Management within the Government Communication and Information System (GCIS)

**By**

**FUMANI SOLANI STANLEY CHABALALA**

**A research report submitted to the Faculty of Management of the University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in Public and Development Management**

**February 2012**

# ABSTRACT

The foundation around which the operations and processes of government and public sector institutions is centred is knowledge and information. However, this asset is not afforded the same recognition or status as physical and financial assets. A growing body of knowledge around Knowledge Management (KM) fostered a curiosity to explore the prevalence of the practice regarding GCIS. The paper also examines the perceptions of the benefits, problems, responsibilities and technology that the organisation utilises to execute its mandate to the general government of the Republic of South Africa.

To realise the objectives of the study, a case study of GCIS was chosen. Questionnaires and in-depth interviews were used as the main instruments of data collection. Key findings of the research indicate that approaches to implementing KM within the organisation are in place; however, they are not strategically driven. KM practice needs to be conceptualised from top management in order that it can be cascaded down to individual units to have an impact on the organisation.

# DECLARATION

I declare that this research is my own unaided work. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Public and Development Management at the University of the Witwatersrand, Johannesburg, South Africa. It has not been submitted for any other degree or examination in any other university.

_____

**Fumani Solani Stanley Chabalala**

**February 2012**

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"*Acknowledgement of one another's faults is the highest duty imposed by our love of truth.*" Ambrose Pierce

I am grateful to my supervisor Dr Horácio Zandamela, for his support, patience, research resources and opportunity to complete my studies. The opportunity afforded by GCIS to grant me permission and to allow their staff to participate in this project while in their line of duty is appreciated. Their willingness to share their personal experiences and knowledge enabled me to complete the study. For all these innumerable contributions, I say to all these kind and helpful people: *A Luta Continua*.

# DEDICATION

To my late mother Gavaza Ndaheni Maria Chabalala, who, in spite of her lack of formal education, encouraged and supported me in all my educational endeavours. Also to Hlamalani, my wife, and Tiyani, Nkiyasi and Hlengeleti, my daughters, who had to endure my absence, as imposed by physical distance, from husband and father, respectively, in the noble pursuit of this enlightenment.

# LIST OF ABBREVIATIONS

| | |
|---|---|
| ASD | Assistant Director |
| BL | Budget Lekgotla |
| BPE | Business Process Engineering |
| BPGSP | Batho Pele Gateway Service Portal |
| CEO | Chief Executive Officer |
| CDW | Community Development Worker |
| CPO | Citizen Post Office |
| CC | Call Centres |
| CD | Chief Director |
| CoP | Community of Practice |
| DD | Deputy Director |
| DoC | Department of Communication |
| DPSA | Department of Public Service and Administration |
| GCIS | Government Communication and Information Systems |
| HRD | Human Resource Director |
| KM | Knowledge Management |
| KN | Knowledge Networks |
| MM (PDM) Management | Masters of Management in Public and Development |
| MDDA | Media Development and Diversity Agency |
| MPCC | Multipurpose Community Centre |
| IM | Information Management |
| IMC | International Marketing Council |
| ICT | Information and Communication Technology |
| IS | Information Systems |
| IT | Information Technology |
| PPP | Public Private Partnership |
| SA | South Africa |
| SACS | South African Communication Service |
| SAMDI | South African Management Development Institute |

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# CHAPTER ONE

# INTRODUCTION

## 1.1 Introduction

An increased demand for services by society has assured a new era in the lives of organisations. To deliver services to citizens requires people with the abilities to know and understand what to provide under any given circumstance. Knowledge Management (KM) has been identified as a fundamental tool which organisations need to adopt in order to influence productivity and also assist in creating a repository environment for retention of knowledge in order that organisations can continuously perform in spite of loss of skills. This chapter provide a framework around which this research report has been structured. The general background of Government Communications Information Systems (GCIS), research problem, the purpose of this research and the strategy pursued in arriving at results and recommendations is briefly reflected.

## 1.2 Background to the Study

### 1.2.1 GCIS location

On 18 May 1998 the (GCIS) was set up at the Office of the Presidency in Pretoria. This organ of state came to replace the South African Communication Services (SACS). Against the background of the transformation agenda, the post-apartheid state required a structure that would enable it to articulate its information and developmental policies without racial bias. Therefore, restructuring would have to involve a two-way communication between the state and the people. It was believed that through this two-way communication process, state policies would

be enhanced through optimum participation of the people in policy- and decision-making processes (Strydom, 1998).

### 1.2.2 GCIS mandate

GCIS was set up as a state organisation with a mandate of facilitating transformation through communication and distribution of information requirements of the state and the people of South Africa. Interrelated organisations were set up to steer growth and development in a positive direction. Organisations such as the Media Development and Diversity Agency (MDDA), Multipurpose Community Centres (MPCC) and International Marketing Council (IMC) were instituted to enhance government communication and to 'market' the country both locally and to the international community.

### 1.2.3 GCIS mission and strategic objectives

The MDDA was set up to help transform the media and advertising industry, and to enhance closer relations with private media groups. MPCCs were designed to enhance dialogue between government and the people. For example, Community Development Workers, Citizen Post Offices and MPCC provided assistance on the e-Government Batho Pele Gateway. All these efforts were designed to enhance the necessary knowledge of both the state and the community (GCIS, 2004).

For the GCIS to realise its mission of "providing leadership in government communication", it was designed to meet the strategic objectives of the institution's transformation process by recognising the interdependence between different government departments and carefully conceptualising the balance between the three tiered governance system put in place by the Constitution (GCIS, 2004):

> "Firstly, the provision of leadership that ensures a better communications act, secondly, the provision of an agenda that includes a common vision and objectives with communication partners, thirdly creation of awareness that democracy has brought and also intensification of provision of information that enhances socio-economic development of the people, fourth, promotion of regional and continental developmental programmes and goals, fifth, provision of research on government policies, programmes and implementation necessary for enhancing information communication, sixth, provision of a platform for better research on information needs of the public, seventh, improved utilization of ICT in the management of organisation and its communication and lastly, the instilling of a culture of learning within the institution."

The strategic objectives of the institution highlighted above focused on the improved performance of the organisation and the efficient delivery of its core business. They also focused on communication insofar as it promoted people's positive perceptions of the state and insofar as it created a positive image abroad. The aim was to have an institution resourced with knowledgeable individuals that could better communicate objectives of the state as well as create a society that would easily understand state policies and win the people's support in its development endeavours.

### 1.2.4 South Africa after 1994

After the historic elections of 27 April 1994, it became clear that the new democratic dispensation had set up a plan with well-defined roles, responsibilities and objectives for good governance for the South African society. FitzGerald, McLennan and Moscow (1997) argues that the state adopted a democratic work structure in order to ensure continuous participation of people in the governance process with retained rights to make decisions by management. With a people-centred approach in state policy initiatives, communication was regarded as a critical area in need of reform, as the then existing structure had apartheid designs

and cultural foundation. Communication was to be the vehicle to spearhead, reflect, educate and inform the people in the new republic about their responsibilities, freedom and rights as citizens in the new dispensation. The need for the transformation of the SACS became a priority for the new government (Strydom, 1998). As a vision, GCIS was mandated "to meet the communication and information needs of government and the people, to ensure a better life for all."[1]

With such a bold vision, the struggle against apartheid by South Africans and the hope for socio-economic justice required institutions of government and policies designed to redress past imbalances as well as people with knowledge to sustain the momentum of change. Stewart (in Chezzi, 1999:1) believes that: "Knowledge has become the most important factor in economic life. It is the chief ingredient of what we buy and sell, the raw material with which we work. Intellectual capital has become the one indispensable asset of corporations." The right to know and the commitment to create a transparent government had to satisfy communication structures with the necessary resources to ensure that the transformation agenda driven by government continue without fail.

### 1.2.5 Communication and its role within a knowledge society

Knowledge has become the most important factor in the economic life of organisations (big and small). It is the chief ingredient of what we buy and sell, the raw material with which we work. Intellectual capital has become the one indispensable asset of corporations. The economic, social and political arrangements within the global village instituted an environment where organisational survival required responsiveness to the economic, social and political orders of the moment. The GCIS came into being as an organisation with the responsibility of facilitating a two-way communication process between government and the people (GCIS, 2005). Communicating government

[1] See www.gcis.gov.za, 2003. 31 May 2005

programmes, policy formulation, consultation and stimulating public participation is critical for the growth of democracy.

Good articulators of government policies and programmes implementation require knowledge and skills which knowledge workers need to acquire over time. In an endeavour to bring into being an effective two-way communication, State President Thabo Mbeki spoke of the new democratic regime's commitment to creating a people-centred society:

> People have a right to be informed about government policies, programmes and services. It (government) therefore also has an inescapable responsibility to ensure that it keeps the people informed on a continuous basis, so that they will be able to intervene in an informed and purposeful manner where their future is at stake. (www.gcis.gov.za/speeches ).

GCIS is a strategic communicator of government information and therefore its communication approach should be people-centred. As a repository of government information, an enabling environment for easier access and retrieval should be created. Data, information and knowledge form the basis for government's communication objectives. It is essential to take note of these various concepts, which are used interchangeably (Stenmark, 2002). Data is the basis of information generation. Contextualizing information requires a level of maturity in this transition of explicit to tacit knowledge.

Today's world has countless volumes of data and information, which is the basis for knowledge creation. The abundant availability of information requires communication tools and strategies of various forms and levels. Information and communication has come to be an integral part of organisational operations, development, and growth. With the advent of new communication and information technologies, literacy has been propelled to greater heights among developed and developing nations. It is thus not enough today to read and write, as the traditional pedagogy of education and literacy has hitherto presented itself.

With these new communication technologies, one witnesses sophisticated scientific information and complex financial transactions, which have become daily practices of professionals; thereby stretching to hitherto unimaginable heights the intellectual and ICT needs of communities (Harvard Business School Press, 1998).

Availability of information is now so extensive and more sophisticated than it used to be. Therefore, in-depth reflection is required in order to understand its form, purpose and effects (April and Izadi, 2004). Jashapara (2004). argues further that attaching importance to whatever information one received requires creative judgment based on a multiplicity of views about reality. In light of the above, and within the context of GCIS, (that is, communication strategy and information systems management), effective government communication and information management of other government organisations requires the creation of tools or a basis on which what is contained in government and the programmes it implements can be articulated and accessed with ease.

### 1.3 Problem statement

Knowledge Management (KM) as a discipline has been in existence since the early 1990s, and its impact within the public sector in South Africa appears to have remained minimal at best, or at worst unimpressive in implementation (Gaffoor and Cloete, 2010). Research on the subject suggests that the practice has been in existence for a number of decades starting from the early 1970s by scholars like Drucker. The apparent difficulties in institutionalizing the practice by many of the public sector organizations have prompted a need to explore the prevalence of the practice within GCIS. As a renewed government communication and information systems organization, a critical role of collecting, storing and communicating government information added pressure to keep citizens informed about policies, services and programmes that government pursued. This created a need for employment of resourceful individuals to drive the mandate and ensure critical skills are attracted to the institution.

Knowledge management practice has been viewed as a critical driver of public sector reform and innovation and thus a critical look at the state of implementation and/or integration within GCIS warrants attention. Platforms of collaboration and knowledge-sharing within government levels have not come out strongly despite the need to speak with one voice when communicating government information by departments. As one amongst the many institutions that government prioritized in transforming towards the turn of the century, the retention of critical institutional knowledge was a challenge in the wake of resignation of individuals who had been part of the old communication agency (SACS).

### 1.4 Purpose statement

The purpose of this study is to explore the extent to which GCIS can demonstrates its willingness to implement KM practice throughout the entire organisation by investigating key indicators that can assist the organisation to move forward as private industry has done. Government communication of information about its development and implementation of policies thereof is critical and there is thus a need for a vehicle to conduct and ascertain that the right messaging is delivered at the correct place and timing is therefore important. The study looked at both perceptions and understanding of KM as it is applied in their own organisation. With successful implementation of the practice, opportunities can be created and a reference point will be there for government to initiate the practice with increased acceleration of efforts.

### 1.5 Research questions

Knowledge Management has been a popularised practice within the private sector but the public sector environment appears to be lacking in the implementation of the practice. Scarcity of skills has been, and still is, a major problem facing South Africa's developmental endeavours. Today's world is ever-changing. Changes in political ideas, systems and organisation, demographic changes and rapid

advances in science and technology are some of the factors which affect the socio-economic landscape of an organisation. Internal and external factors are endemic in forcing organisational changes for it to survive as an organisation with a purpose. In order to understand KM practice from the international to local environment, the following questions will look at addressing the gap that exists between the private and public sectors and view this through the GCIS lens as a focal point for this study:

- What is the understanding of Knowledge Management Practice within GCIS?
- What are the systems and processes in place that the organisation has embarked upon to see through the implementation of the practice?
- How are the internal arrangements within the organisation inhibiting and/or enabling the process to unfold within GCIS?

### 1.6 Significance of the study

The GCIS provides government communications and information to both the local and international communities. With an increase in international trading, as argued by Mhone and Edighedji (2003), the ability of economically powerful states to advance their interests to the detriment of weak states has increased. South Africa's return to the community of nations has to attract interest for investment by foreign countries in order to pull away from the poverty and wide economic disparity which has been the apartheid legacy. This brings to light the importance of having competent structures in place to advance the implementation of government's vision; which is to bring about a better life for all. Principles, practices, strategy and frameworks which would be exposed as a result of this study might assist in bringing change and a new focus in the way government business is run and communicated.

Developed countries thrive as a result of having and keeping competent skills in their environment and this research could inspire the development of strategies and practices that assist to keep the most skilled resources within government and

thus alleviate loss of skills and knowledge when KM practice is entrenched as a formal practice of government institutions. Goh (2004) confirms the importance of creating a space for KM practice to ensure that entrenched good organisational performance is continued to ease the transformation process. This study offers insights into how the Knowledge Management and Information Centre, a directorate within the Department, organises itself in assisting the organisation to realise its information generation and communication mandate which it was set out to do. This study, it is hoped, will assist the organisation to look at processes of institutionalising the practice, since systems, processes, structures and technology already exist. The compelling reason for undertaking this study is the assumption that effective organisational knowledge sharing increases employee commitment, adaptability and improvement in job performance. Therefore an enhanced body of knowledge within the public sector institutions of South Africa will play a key role in the development and growth of these institutions.

### 1.7 Overview of research methodology

Research methodology identifies all the techniques, methods and procedures adopted to carry out the research process. Leedy (1993) defines research as a systematic method of gathering and analysing data in order to improve the understanding of the phenomena that the researcher is interested in. The research followed the qualitative approach or methodology. This multi-method approach involves collecting and analysing empirical information from multiple sources as first-person accounts, life histories, visual records, semi-structured and open-ended interviews, formal and informal observation of materials, amongst others (Babbie, 2005).

A single case study design was the pursued methodology in this study. Data was collected to answer research questions and address the purpose of the study. Observation, interviews, and questionnaire techniques were used to collect data. Primary and secondary sources of obtaining data were used in this research.

A total sample of 30 people was targeted for the questionnaire and seven (7) for open-ended interview. A total number of 18 responded to the questionnaire and five participated in the in-depth interview. Once an acceptable number of interviewees had been identified, analysis and interpretation of the data had to follow. Since analysis requires resolving complex issues from the whole, data gathered were coded and grouped into themes. In interpreting the complex information gathered, relevant isolated variables had to be reconstructed and reorganised to make sense of the data.

### 1.8 Structure of the report

The report has been organised into six parts, providing a roadmap that the reader will take in learning about Knowledge Management and the role it plays in assisting organisations to develop its knowledge repository and the assistance it can provide to the GCIS to instutionalise and map knowledge processes and communications to ensure government information about policies and the services delivered are clearly articulated and reach all corners of the Republic. The report aimed at exploring the prevalence of knowledge management and the level at which the practice is implemented within the organisation. Processes, people, technology and structure were explored to assess the feasibility of institutionalising the practice. The following chapters support the six areas entertained in this report.

**Chapter one: Introduction**

This provides an overview of the organisational background, research problem, and research questions which constituted the centre stage of this study. The discussion addresses knowledge management as it unfolded within the institution. The chapter also expands on the global trends around the practices which were pioneered around KM practices and how these have assisted those organisations to position themselves within the global stage as knowledge centres and outlines the research theme, proposition, research problem, literature review, research

methodology and sources used in examining theory of Knowledge Management practice.

**Chapter two: Literature review**

The chapter focuses on the growth of knowledge management and how both public and private sectors developed the theory and practice. It reflects on how the practice was pioneered and how institutions around the world came to attach significance to its role and practice in developing an organisation and the role in influencing GCIS business practice. The significance of the practice in assisting government in its communication role is also examined.

**Chapter three: Research Methodology**

This chapter discusses the method and design used in the collection of data. Motivation for using the research method and data collection instruments is also provided for in this chapter.

**Chapter Four: Data presentation**

This chapter presents the research results and discusses the various findings and views of individual interviewees as presented in the literature review.

**Chapter: Five Data Analysis**

This covers analysis, interpretation and discussion of the research in accordance with the research interview structure and the research questions formulated to guide the study.

**Chapter Six: Conclusion and Recommendations**

The study concludes with the main research findings which are drawn from the interpretation of the results. This chapter addresses the significance and the benefits derived from the practice of KM and the changes it can promote for an organisation when institutionalised. It further adds insight into the benefits of KM practice and the prospect of further research in this area within the public service arena.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter demonstrates how Knowledge Management (KM) theory and practice has evolved over time, as well as their relations to data capturing and information management in public and private sector institutions. Specifically, the chapter shows how KM practices became a focus of attention for academics and practitioners in both, the private and public sectors.

## 2.2 Definition of concepts

Making a theoretical distinction between data, information, knowledge and wisdom is very important in drawing attention to their value and the resources that need to be invested by organisations. Defining knowledge management practices, data, information, knowledge, communication, and information technology, will help show how the concepts are deployed as well as the interrelations that exist between them. However, these are only working definitions since there is no universal conception of knowledge management practices. The choice of these concepts for definition is not only based on their interchangeable ability in usage by various individuals in their understanding of KM, but also that they are an integral part of KM. Clarifying their meaning would help generate a useful understanding of KM.

April, *et al*., (2005:3) argues that Data "is a set of discrete, objective facts about events in an organisational context, data is most usefully described as structured records of transaction." They are raw material intended to create information. Data is further defined as "a representation of facts or concepts in an organized manner in order that it may be stored, communicated, interpreted, or processed by

automated means."[2] Firestone (2003) argues that data implies everything outside the mind can be manipulated and is constituted by facts or information. This is the lowest level of 'information'. In most cases, it is not even accessible to relevant people. It has to be altered before being turned into something beneficial. Data is by itself not valuable. However, the moment data is perceived by an interpreter as important, depending on the level of her or his knowledge, it then becomes information.

**Information** "is a term with many meanings depending on context, but is as a rule closely related to such concepts as meaning, knowledge, instruction, communication, representation and mental stimulus."[3] For Firestone (2003), information is data, which has been changed and presented in a significant way, carrying meaning to recipients. It results from the processing, manoeuvrings and organising of data in a way that adds to the knowledge of a person receiving it. Whenever one wishes to express what one knows the use of oral, written, graphic, gestural and body language constitutes information, which a knowing mind may assimilate, grasp and integrate into one's structure of knowledge. Therefore, information is data, which is embedded in a context of relevance to the recipient (Prusak, 2001). The body of information consists of facts, opinions, ideas, theories, principles and model. This body of information includes awareness, ignorance, familiarity, conceptualization, comprehending and understanding. Information is thus available to support decision-making process in an organisation.

**Knowledge** "is awareness and an understanding of facts, truths or information gained in the form of experience or learning."[4] Allee (1997) argues that knowledge is information that has been processed and can be accessed by others through the mind of an individual. This implies that knowledge is the experience, belief and information that can be communicated and shared. April, *et al*. (2004:4) define knowledge as "when the intellect (the capacity to think) does purposeful

[2] See www.utmb.edu/is/security/glossary.htm. 01 May 2005
[3] See www.wikipedia.org/wiki/Information. 01 May 2005
[4] See www.wikipedia.org/wiki/knowledge. 01 may 2005

work using data and information." Sveiby (1997) defines knowledge as "the capacity to act in context". Wilson (2002:4) defines knowledge as a "mental process of comprehension, understanding and learning that goes on in the mind and only in the mind, however much they involve in interaction with the world outside the mind, and interaction with others." Knowledge is therefore, a human capability of making meaning from information.

**Communication** is "the transfer of ideas from one individual to another individual. Generally, this takes place using a medium of exchange, such as words, images, sounds, touches, or even smells."[5] For Sveiby (1997) the effectiveness of human communication depends as much on the personal chemistry between communicators as on the clarity or quality of the reports that pass between them, how well particular people suit particular customers and vice-versa is just as important, if not more important, than the quality and quantity of the knowledge to be imparted. Communication is an important and powerful tool of conveying knowledge to intended recipients. For communication to be effective, the right conveyer, right people and correct audience should be identified at all times.

**Information Technology** is argued by Harvard Business School Press (1998) as being the transformation of information using hardware and software technology infrastructure through processing and presenting data into a meaningful form which helps to reduce uncertainty and it facilitate the process of future decision making for an organisation. Through IT, complex tasks are created, processed, modified and simplified in design and application to the user and recipient. Allee (1997) argues that information technologies assist in creating new knowledge, which can then assist to enhance communication, retention and organisational development.

Through the definitions provided, a thin line has been drawn between the various concepts. It is apparent that the above concepts are interrelated, as one concept is

[5] See www. edtech.tennessee.edu/~set19/html/terminology.htm. 01 May 2005

defined in terms of another or others. In spite of this interrelation, no pair of concepts is synonymous. Failure to acknowledge nuances, or differences between these concepts, might give the wrong impression, for example, that data capturing, information management and information technology lead to the same understanding of knowledge management practices. Nevertheless, the knowledge management environment consists of people, processes, content and technology.

The interdisciplinary nature of KM requires a balanced view of these elements when building organisational capacity (Sveiby, 1997). The connection derived from defining the above-mentioned concepts represents the totality of understanding the evolution of KM. No one concept should be treated in isolation from another for KM to be clearly understood. Thinkers in the school of management noted the arrival of the information age characterized by globalisation, complexities and constant changes in the way people went about doing business. Social scientists were tempted to sensitise these developments by generating an understanding of how to go about doing business considering the movement of people between countries.

Although KM practices existed during the 1960s and 1970s, sensitizing this practice predominated the1990s as alluded above. KM might mean different understanding to different people. Various thinkers' perspectives are highlighted below. Albert in Maholtra (1997) defines Knowledge Management as "the process of collecting, organising, classifying and disseminating information throughout an organisation, so as to make it purposeful to those who need it".

Essentially, KM embodies organisational processes that seek a synergistic combination of data and information processing capacities. This requires the combination of information technologies and innovative processing by human beings. According to Kyritsis (2001) KM is not only a transfer of personal knowledge and information between people but the actions derived from these information stimuli.

Awad and Ghaziri (2004:1) define KM as the "process of capturing and making use of the firm's collective expertise anywhere in the business ─ on paper, in documents, in databases or in people's heads." Wigg (1994) defines KM as all activities which an organisation needs to foster intelligent performance in a manner that is sustainable and value for money. For Wigg, an organisation has to create, store, disseminate, upgrade and apply knowledge for its own development and ensure there is return on its investment from the resources being invested.

Alavi and Leider (2001:109) define knowledge as a "justified personal belief that increases an individual's capacity to take effective action." Similarly, Sveiby (1997) suggests that knowledge is an intangible resource that exists in the mind of the individual which when tapped into assists in increasing the organisation's fortunes. Polanyi in Allee (1997) looks at knowledge as either explicit or tacit. Explicit knowledge can be expressed in numerical terms and words. These are then easily shared formally and systematically in the form of data, specifications, manuals, organised repositories, etc.

For other thinkers, explicit knowledge is viewed as "know about" (Cong and Pandya, 2003). Tacit knowledge, on the other hand, is habits and cultures which an individual possesses and which may be difficult to communicate in words and symbols. This can also be described as know-how which in an individual includes insights, intuition, and hunches.
This type of knowledge is often built on experience and is difficult to formalize and share (Cong, *et al*., 2003). However, explicit knowledge transfer is a relatively common occurrence. Employees share reports, financial budgets, policies, and similar.

Tacit knowledge, however, needs to be converted into explicit knowledge in order for it to be shared. This needs to be done without losing critical parts of the tacit knowledge. The transfer of tacit knowledge into explicit knowledge (within the individual) and the transfer of explicit knowledge between people (within or

between organizations) are two main practical components of KM theory. Sharratt and Usoro (2003:188) define knowledge as being "directly related to understanding and is gained through the interpretation of information". Alavi and Leidner (2001:109) argue that knowledge is not the same thing as information because "information is converted to knowledge once it is articulated and presented to others in the form of text, computer output, spoken, or written words or other means."

Alavi, *et al*. (2001) believe that knowledge enables people to interpret information or derive meaning from data. They make two additional points: Firstly, "in order for someone's personalized knowledge to be useful to another, this knowledge must be communicated in such a manner as to be interpretable and accessible; and secondly, hoards of information are of little value and "only information that is actively processed in the mind of an individual through reflection, enlightenment, and learning is useful" (Alavi, *et al*., 2001:110). In spite of the apparent diversity of perspectives on KM, there is a great deal of convergence in areas of competence, understanding, action in response to information, and general totality of growth in terms of experience. Alavi, *et al*. (2001) create synergy in KM theory because they highlight communication as the pillar of responsive and intelligent performance based on acquiring and understanding of shared information.
Communication with all its intent and purpose determines the performance levels of an organisation and its goals.

### 2.2.1 Types of knowledge

There are two kinds of knowledge as discussed earlier under the definition of KM. One is explicit knowledge. This type of knowledge can be expressed in words and numbers and shared in the form of data, scientific formulae, product specification, manuals and other forms of publications. This knowledge can be readily transmitted across individuals formally and systematically. The second type is tacit knowledge. This is the kind of knowledge that is not easily expressible and visible. It is highly personal and hard to formalise. Subjective insights, intuitions

and hunches fall into this category of knowledge. Furthermore, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, association, values or emotions he or she embraces (Takeuchi and Nonaka, 2004).

By looking at the number of KM initiatives which relate to purposeful processes of capturing, storing, sharing and leveraging what employees know, it is necessary to draw parallels between two types of knowledge (explicit and tacit knowledge) which Japanese theorists Nonaka and Takeuchi were able to draw from the success of Japanese companies (Takeuchi, *et al*., 2004). The Japanese intellectual tradition values the embodiment of direct, personal experience. The West puts emphasis on explicit knowledge whereas the Japanese focus more on tacit knowledge, influenced by their philosophy, perceptions, ideals, values, emotional and mental modes (Takeuchi, 1998).

Knowledge Management owes its inspiration to Polanyi and the Japanese organization scholarship 'guru' Nonaka. Both argue that knowledge has two forms: explicit and tacit, which have some similarity to Zhu's hard and soft knowledge assets (Zhu, 2004). Explicit knowledge can be captured and documented or stored in databases. It is formal and systematic and this makes it easier to communicate and share. This includes patents, instruction manuals, written procedures, best practices, lessons learned, and research findings. Explicit knowledge can be categorised as either structured or unstructured. Structured knowledge is data or information organised in a particular way, which allows for future retrieval. Stored data includes archived documents and databases. In contrast, there are e-mails, images, training courses, audio and video selections classified as unstructured knowledge because the information they contain is not referenced for retrieval (Cong, *et al.*, 2003).

One of the objectives of KM is to make knowledge practice more visible in organisational work. For Polanyi, tacit knowledge is personal and specific to certain situations (Davenport and Prusak, 1998). The human mind acts as a repository for this knowledge (Allee, 1997). Tacit knowledge, however, needs to

be converted into explicit knowledge in order for this sharing to take place. This needs to be done without losing critical parts of the tacit knowledge (Nonaka, 1994). Allee (1997) further argues that tacit knowledge is centred on 'mental models', which includes concepts, images, beliefs, viewpoints and value sets. Technical skills include concrete skills and expertise, and hands-on experience. They are acquired through rehearsal, eventually forming a pivotal point for tacit knowledge. The interaction of the two forms of knowledge assists an organisation to create a repository for enhancing its performance.

**Knowledge Management** and organizational acumen refer to the ability of an organization to draw together information in order to innovate, create knowledge, and to act successfully based on the knowledge that it has generated. Organisations should value knowledge in order to know how and when to access this knowledge. Duffy, Jooste and Whittaker (1999) argue that knowledge is an integral and indispensable part of an organisation's business processes. Thus, it should be valued as an asset to an organisation. The competence of an organisation constitutes the measure of its success in a rather rapidly changing or highly competitive atmosphere of knowledge organization. The development and leveraging of organizational knowledge is called knowledge management. The human element of KM is very important. The term knowledge capital is occasionally used to portray the intellectual wealth of employees and is a real certifiable asset of organizational value. Thus, in the transformation of an organization to a knowledge organization, while harnessing intellectual capital and knowledge capital, information technology influences the speed with which the process is executed. Technology enhances faster creation, organising, storage, retrieval and dissemination.

### 2.3 The origins of Knowledge Management

Various sources present KM as a conscious discipline that has developed in the last ten to twenty years. Notable pioneers of the discipline are such thinkers as Drucker in the 1970s, Karl-Erick Sveiby and Nonaka and Takeuchi in the 1980s

and 1990s respectively. Economic, social and technological developments rapidly changed the way the corporate world had previously run its business. Opportunities and competition drove the business institutions to respond through downsizing, merging, acquiring, re-engineering and outsourcing (National Electronic Library of Health, 2001). While these developments generated financial benefits in institutions in the short term, in the end institutions lost institutional knowledge.

By the early 1990s a growing body of academics and consultants came to view KM as a highly promising concept in academic and business circles. Large international accounting firms such as PriceWaterhouse Coopers, KPMG, and Ernst and Young, to name but a few came to recognise KM and began to use it in their professional practices. Information technology (IT) tools came to play a fundamental role in ensuring that companies remain competitive (Chezzi, 1999).

Challenges due to too much attention in the use of information technology tools became prominent. These challenges prompted practitioners to think beyond ICT in the development of KM as an institutional discipline of value. After the euphoria about KM had subsided, corporate organisations realized that KM is not just the application of ICT in business but also the utilisation of human intellectual capital over time (Seftel, 1998).

### 2.4 Globalisation and knowledge management

As society and economic situations of nations over the years change, there has been a movement of goods and services, people, finance and information across borders because of drivers such as trade and exchange, wars and conquest, voluntary and forced migration. Becerra-Fernandez, Gonzalez and Sabherwal (2004**)** argued that globalisation is the manifestation of complex relationships, which encompass a wide variety of tendencies and practices in economic, social and cultural spheres. Given the rapid increase in the flow of goods, services, capital ideas, information and people between countries, the phenomenon of

cross-border integration in economic, social and cultural practices became inevitable. Through these interdependencies, against the background of international power imbalances and socio-economic inequalities, trade and investment liberalisation, entrepreneurship, technological innovation and reduction of communication costs and global social networks enhanced economic integration between countries.

The revolution in information technology increased the commercial value of trading between states. Societies, organizations and individuals live in an ever-changing environment, which requires constant preparedness to learn, adapt and survive. To create challenges and opportunities requires the necessary knowledge to manage and manoeuvre in the process. April and Izadi (2004:1) enhanced this argument by stating that globalisation and technology innovation transformed the world and continued to do so by making governments and companies rethink the way in which they operate their businesses.

In ancient Greece, Plato captured and elaborated on the thinking of his mentor Socrates. Generations that came after were able to discover and share that thinking, and in turn reinterpret those thoughts which stimulated them to attain fresh insights and creativity. In other cultures, the Analects of Confucius, The Art of War of Sun Tzu, or the pyramids of Egypt and Mexico, have served similar knowledge sharing function (World Development Report, 1998).

For centuries, artisans have been passing on their trade to their apprentices through observation and practice. Oral tradition and history also helped to impart ways of doing and thinking for generations in African cultures. This fostered the imparting of knowledge and cultural traditions with modifications due to changing times and interaction between different groupings of people.

With the advent of technology, information became available all over the world. This technology has enabled business transactions to be executed with increasing efficiency. The link between global powers in business transactions enabled

knowledge practitioners and academics to examine the influence of IT in Knowledge Management.

Ballantyne, Labelle and Rudgard (2000) argued that in this globalised world, development was seen as a joint effort of government, civil society, communities, Non-Governmental Organisations (NGOs) and the private sector. Through Public Private Partnerships (PPPs), new ways of fighting poverty, underdevelopment and unemployment are mirrored in these changes to enhance development co-operation among states.

New tools suited for informing, learning and knowledge sharing are required in order to reform the way work processes are executed. This is a step forward from the erstwhile emphasis on sheer technical abilities. Democratisation (including good governance) has fostered an environment where information and communication technology (ICT) tools have become widely used in generating wealth and jobs. Bellantyne, *et al*. (2000) argued that ICTs managed to bring together government and communities in a manner that improved service delivery and expectation of services by communities. Critics, though, contest this view arguing that, on the contrary, ICTs tend to take away jobs of a good number of people, which in turn perpetuates the vicious cycle of poverty and increases unemployment. Nevertheless, KM practice, it is argued, enhances the growth of organisations and encourages knowledge repository such that the movement of skills from organisations does not occur to the detriment of the organisation.

### 2.5 Knowledge management practice in the public sector

Public sector organizations require, in their execution of tasks and responsibilities, individuals who will ensure that policies, tasks, services and responsibilities are executed. In the process of executing such tasks and responsibilities, these individuals amass a lot of information and knowledge that enables their organizations to perform at their optimal level. The fact that the information and knowledge they have assists in the execution of their responsibilities qualifies

them to be referred to as knowledge workers. Chiem (2001) emphasizes the significance of knowledge workers in the management of knowledge in the public sector. Knowledge workers have an important role to play in the delivery of services to communities. Knowledge sharing furthermore stimulates the productivity of workers.

However, government structures and administrative procedures, security, privacy or regulatory framework and red tape could interfere with the flow of information.[6] Awad and Ghaziri (2003) believe that since government is the largest institution that keeps data information, it is also the basis for the generation of knowledge in society. Bahra (2001) also sees the significance of the structure of government as one key challenge in the management of knowledge. In spite of this, Bahra (2001) notes several factors, leading to reluctance among knowledge workers to share their knowledge:

Firstly, reciprocity: workers can share knowledge provided they will receive valuable knowledge in return, Secondly, repute: it is in the interest of the knowledge worker to be viewed as an expert in a field. This enhances assertiveness if one is viewed as custodian of particular knowledge and thirdly, altruism: KM workers will share knowledge provided they find certain subjects interesting and fascinating to share with others. Competency in a particular field ensures that the attributes and contributions of an individual in a group setting provides assertiveness and self-worth, which is significant to the way one will be perceived in such a group. Thus, keeping it to oneself is one condition of self-preservation of one's employment. Breaching this notion is fundamental in popularizing and stimulating the culture of knowledge sharing in an organisation.

The human mind is central to knowledge management practices. While this is the case, the focus of Knowledge Management has to be directed towards managing people within an institution. This focus has created a situation where government sets up processes assisted by information technology tools to enhance delivery of

services to individual people and other private sector organisations. However, governments worldwide are struggling to be responsive to unexpected challenges and to deliver higher quality services to the people. Inter-American Development Bank (2007:1) defines e-government as "the ability to obtain government services through non-traditional electronic means, enabling access to government information and to completion of government transactions on an anywhere, any-time basis and in conformance to equal access requirements". Over the last few years, e-government has increasingly become important in South Africa and in the rest of the world. E-government has been acknowledged as offering considerable opportunities for improving the operations and effectiveness of government.

There is, however, no effective facility to enable ongoing exchanges on key issues. Finally, from the side of government, there exists no facility that will enable information sharing on the workings of e-government, that is, the systems that are deployed.[7] At the heart of knowledge transfer is communication and interpersonal relationships. Technology, just like e-governance, acts as an aid, rather than a substitute for managing people within organisations as well assisting in facilitating processes, which enhance organisational performances (Cook, 1997). It is essential to create an environment where people are able to learn and create knowledge, which then assists in shaping the structure, the style of management, and the culture of the organisation. Formal and informal structures of managing organisational knowledge should be put in place to ensure effective and efficient knowledge sharing.

Formal structures, systems, processes and procedures, which assist in ensuring the prevalence of KM environment, should be put in place. Organisational culture should be created informally by way of creating working groups, tea break gatherings and other social gatherings. Allowing these activities to unfold assists in influencing the thinking and execution of actions in a particular way (Viedge, 1997). KM can be seen as representing a culmination and integration of many organisational developments of historical ideas. This includes total quality

[7] See www.cpsi.co.za/activities.asp . 13 August 2005

management, business re-engineering, organisational learning, benchmarking, competitive intelligence, and change management, among others. It thus encapsulates these concepts in a more holistic way, focusing on effective creation and application of knowledge. The private sector thus views KM as a tool for creating wealth (Viedge, 1997).

### 2.6 Inter-relations between public and private sector organisations

Scholars of KM have realized that IT is not sacrosanct by itself in the elevation of the KM body of knowledge within an organization. Knowledge repository, particularly tacit knowledge, can happen and move an organization forward if the significance of the human being is given its rightful place and if institutional memory is not to be compromised. Gonzalez (2004) argued that loss of tacit knowledge can arise from the movement of experienced staff away from the organisation as a result of attraction of new prospects elsewhere. This in the processes creates a vacuum due to loss of skilled personnel and also institutional memory. An organisation needs to be proficient at creating and applying new knowledge in order to thrive in a changing and unpredictable world.

Government outsourced many services to the private sector. Consequently, an improved understanding of the operational practices of both sectors would assist in enhancing business performance as well as effective sharing and/or interchange of human resources. Effective performance of government machinery depends on the acquisition of knowledge, both inside and outside government. Therefore, knowledge is a central resource, and government needs to re-orient itself in order to have a competitive edge in the global market (Cong, *et al*., 2003). Tacit knowledge is an intangible assert. Devising a tool that would be used as a yardstick to assess such knowledge is a challenge. Nevertheless, Skyrme (2003) provides a tool to measure the intellectual property of an organisation based on these categories:

Firstly, Human Capital: in the minds of individuals: knowledge, competences, experience, know-how, innovation, etc. All these qualities assist an individual to carry out value-creating tasks, opportunities and goals; Secondly, Structural Capital – these are organisational resources which are tangible. This includes among others: processes, information systems, databases. This form of capital assists an individual to ensure that the objectives of the organisation operate within the confines and dictates of market forces. Market forces determine how an organisation should prepare itself for competition to advance its market share. The extent of the organisational market size influences how an organisation prepares itself strategically for its survival and growth.

Understanding how the market operates helps to generate appropriate responses to market operations and needs. Global trends make the market unpredictable and therefore individual, with a flexible understanding of the environment where they operate, assisting in keeping their organisation abreast of current trends (Allee, 1997). Thirdly, Relationship (or Customer) Capital ─ customer relationships, brands, trademarks. Understanding the depth from where one operates enhances one's delivery capacities. Informed decisions and calculated business acumen are based on one's ability to understand the unpredictable changes of one's environment and other forces.

Skyrme's (2003) categorisation serves to provide a background for assessing KM practices. Edvinsson and Malone, cited in Skyrme (2003), developed the following measures in order to assess KM practices better: 'firstly, financial: income per employee, market value per employee etc. Secondly, Customer: number of customer visits, satisfied customer index, lost customers. Thirdly, Process: administrative error rate, IT expense per employee. Fourth, Renewal and Development: training per employee, R&D expense/administrative expense, satisfied employee index. Lastly, Human: leadership index, employee turnover, IT literacy'.

Edvinsson and Malone, cited in Skyrme (2003), further argued that the provision of these measuring tools in addition to financial measures, which were extensively used, is significant in provision of knowledge and progression of an organisation at a number of levels. Indicators highlighted above which are used to measure organizational performance are significant in the public sector environment in providing the following:

- Firstly, information literacy, which assists to strengthen workflow and knowledge sharing.
- Secondly, a baseline for successful information and knowledge management.
- Thirdly, valuable knowledge, as an Asset of Public Sector Information Management Strategy.
- Fourth, drivers of the business value of knowledge management implementation.[8]

People's strong resistance to change is often rooted in deeply conditioned or historically resilient feelings. Persistence and open-mindedness are required to help people in these situations to begin to see things differently. Organisational change is inevitable. The knowledge age is compelling people, particularly those in leadership authorities, to seek other forms of creating organisational success in a sustainable way. Noting that industrialization has come to pass, the information age is changing the way business is run.

Realizing the significance of technology in the changing phases of doing business, IT alone will not ensure success of organisations without a mechanism that ensures that knowledge workers share their experiences. This should also be facilitated by creating a repository mechanism to assist in tapping into this knowledge in the absence of these individuals. Developing systems and processes to leverage and preserve organisational knowledge has become an essential element of organisational sustenance. People learn by connecting new information to patterns that they already understand, thereby extending the existing patterns. A

[8] See http://www.sas.com/offices/europe/uk/public_sector/kpi.html . 01 August 2005

new prominence is placed on an economy based on services, ideas and intangibles rather than physical product and process. It is then a matter of necessity that organisational knowledge be managed effectively and efficiently for an organisation's prosperity (Lomax, 2002).

In future, KM methods, processes, tools and techniques will be internalised and automated in systems and processes of organisations. Although the manager will have to facilitate the process, it will be the prerogative of knowledge workers to ensure that systems and processes are fully functional. Laborious and costly manual knowledge categorisation and indexing will be replaced by intelligent agent-ware, neural networking and personal profiling technologies that will summarise and deliver concepts of relevance and relevant 'knowers' to the knowledge worker.

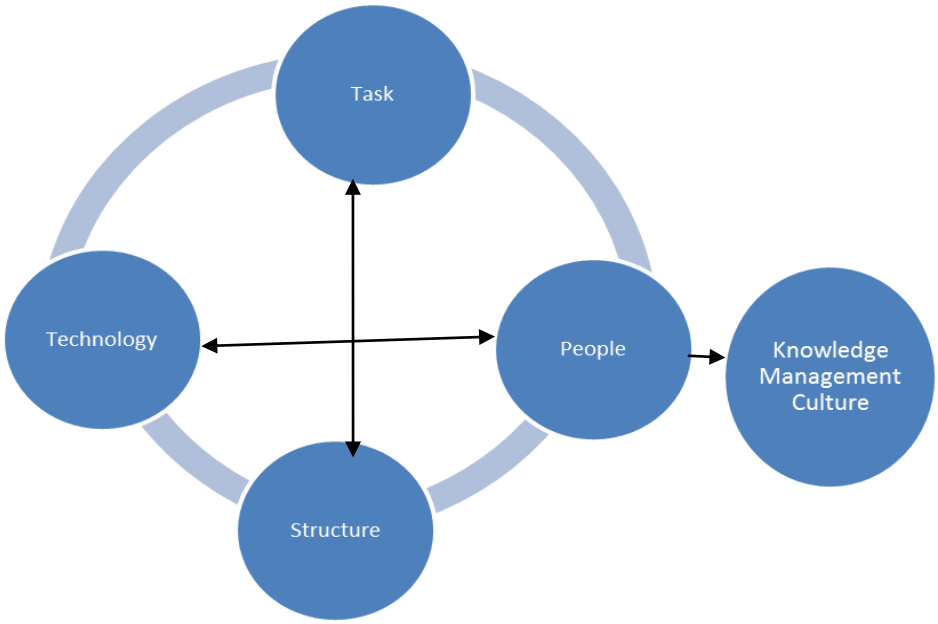
From a global perspective, the knowledge-fragmented schools will be synergised into a network of extraordinary global knowledge network, which then will enhance global collaboration, confronting a host of global communities' challenges. In the process, a high level of trust, an open two-way communication, rapid learning and knowledge sharing will improve the levels of economic, social and political development of countries (Young, 2005). KM is shifting back to individuals, encouraging 'knowledge-conscious behaviour,' improving communication and encouraging enjoyment of the work environment, which helps to improve organizational output (McKellar, 2005). This helps to understand why organisations cannot conduct business in isolation from the broader communities of organisations (Allee, 1997). The argument posed by the various thinkers above brought into the open the value proposition of knowledge when compared with other instruments such as finance. Central to this argument is the influence of technology which took centre stage in knowledge creation, storage and sharing.

## 2.7 Developing a Knowledge Management culture in a changing organization

The behaviour and attitudes of people in an organisation influenced the way the people interact and engage as a community within an organisation. Allee (1997:211) argues that culture refers "to the knowledge people hold collectively, enabling them to interpret their experience in similar ways and behave accordingly to agree upon norms". Furthermore, culture is based on the set of assumptions and beliefs about the world in which people live. Prusak (2001) argues that information management is the body of knowledge, which focuses on how information is managed, free from technologies that manipulate and accommodate it. In the same vein, KM shares information management's user perspective, and focuses on the value of user satisfaction rather than of technological efficiency. When an organisation is transformed, change of organisational outlook and cultural tradition has to be based on the kind of values and beliefs that are required for a new organisation.

Allee (1997) argues that any culture that is practiced is based on a set of assumptions and beliefs of how the world works to a particular grouping of people. As KM is concerned with groups, communities and networks within a structured environment, with specific deliverables to execute, the underlying Leavitt (1965) model provides an insight into how an organisation changes from old to new sets of values informed by a new cultural belief which manifests itself in an organisation. If an organization wants to implement a KM program, Leavitt's (1965) model of organizational change can provide insight as shown below:

Figure 1: Leavitt's Model of Change: Task, Structure, People &Technology




Source: Hurley and Green (2005:5)

Leavitt suggests that the effectiveness of any change programme (including a KM programme) can only be achieved through a balance of four organizational subsystems: technology, structure, tasks and people.

The model shown in Figure 1 illustrates how all the four items are interrelated. Leavitt's model suggests that all four subsystems must be co-ordinated and balanced to create an effective KM culture. Organizational culture is one of the three main measures which determine KM in an organization. A KM culture is fundamental to any organization. On their own, systems and processes of knowledge creation and sharing are ineffective if not outright impotent. Additionally, there is a need for management and leadership support of the correct systems and processes to bear relevance on the 'lifeblood' of the institution. An organization's culture (without KM) has been identified as either a major catalyst or a major hindrance to knowledge creation and sharing (Alavi and Leidner, 2001).

A knowledge-friendly organizational culture is one of the most vital conditions leading to the success of KM initiatives in organizations (Davenport and Prusak, 1998). Allee (1997:212) argues that knowledge within an organization assists in identifying the people in the organization. She further indicates that in expanding knowledge, "we must look at the self that creates it."

The expansion and amalgamation of KM processes throughout an organization usually calls for a major cultural change. Largely, this is because organizations have traditionally rewarded employees based on individual performance. Specifically, cultural barriers to KM (e.g. cultural norms that promote and encourage knowledge hoarding) must be replaced by an organizational culture that endorses and promotes knowledge sharing. It is important that the new culture promotes attitudes and behaviours that advance, permit, and reimburse sharing of knowledge and insights. An employee must not perceive his or her value to the organization as worthwhile whenever important knowledge is withheld deliberately (that is, knowledge hoarding). Davenport and Prusak (1998) argues that organizations that want to develop a KM programme need to promote a culture that is capable of fostering behaviours that inspire knowledge sharing, transfer, and application.

Knowledge hoarding needs to be discouraged (Yang, 2004). Davenport and Prusak(1998) argues that many organizations have the rational belief that sharing knowledge will dissipate the value within an institution and thus render their personal worth to the organization useless. Employees need to be assured that their knowledge will not be exploited. The effect of this predicament can be minimized through lasting employment assurance (Brand, 1998) and the expansion of a culture that is based on trust and truthfulness (Sharratt and Usoro, 2003).

Duffy, *et al*. (1999) defines this activity as "informed empowerment," which they believe is based on an individual's decision, supported by correct information.

When setting up this type of culture, employees need to be assured that all thoughts are treasured. For Viedge (1997:48) "the culture is also the repository of the wisdom the organization has accumulated." The approach to launching new products may be excellent even though it is not demanded.

For knowledge creation and transfer to prosper, group members must understand that the viability of their group and/or networks depends on their roles and obligations. Without this understanding, the group collapses. Knowledge sharing has the effect not only of increasing a shared knowledge base, but also of building trust in a group (Duffy, *et al*., 1999). Tacit knowledge is exchanged through joint activities rather than through written or verbal orders (Nonaka, 1994; Davenport, 1998). Allee (1997) suggests that learning is the cornerstone of knowledge building, a process that becomes more effective when knowledge is shared in a group. Lesser and Storck (2001) share this view. They suggest that knowledge creation is best served by close ties in a "Community of Practice," since these individuals share a language and are more at ease when discussing ideas openly and challenging the ideas of others. They suggest that this encourages a shared understanding or a "collective-knowledge base."

Leadership commitment to KM processes is also essential. In a case study that compared manufacturing plants that had successful KM programmes to ones that did not have, Kalling (2003) argued that one of the critical factors leading to an organization's success was the commitment among top leaders of the organization. Leadership involvement and commitment assists in shaping the way systems operate. Any level of resentment and lack of passion on the part of the leadership will negatively affect the implementation of KM programmes in an organization (Kalling, 2003: 119). Generally, leadership is responsible for creating the knowledge vision of the organization, communicating that vision, and building a culture that regards knowledge as a fundamental organizational resource (Allee, 1999; Sveiby, 1997).

## 2.8 Conclusion

A very large proportion of the literature explored on KM was directed towards commercial businesses and firms. It should be noted that many organisations around the world had considered KM as a solution to the challenges brought about by the information age. This literature review was informed by the willingness to understand the gap that many review papers suggest about minimal implementation or lack thereof of KM practice by public sector institutions. The first issue was to reflect on the understanding of the concept KM within public sector institutions. Furthermore comparisons were made with private sector organisations, noting how serious the institutions view the implementation of KM in view of the potential it had in influencing their bottom line. Again, looking at the public sector environment, the issue was to examine responsiveness to implementation and the impact that the practice can provide to institutions of government when KM is formally institutionalised.

Expressions that also found their way into this review were influence that the practice had in mitigating potential skills loss by an organisation. To this end, scholars such as April *et al*. (2004:15) argued that KM has the "potential to create better workplaces, empower employees, develop people's capabilities and capacities and increase organisational productivity and quality". The discussion outline above gave a synopsis of how KM and its manifestation within both private and public sector has improved the way the organisation dealt with its knowledge repository. Different themes around KM practice and theories were directed at uncovering how KM practise can be institutionalised in an environment where competition for resources is vital for organisational survival.

There is a need for organisations (public or private) to institutionalise KM practice so that their knowledge base remains embedded within the organisation and the community of practice is steered by organisational leadership that ensures continuity of good business practice. The literature confirms that KM practices exist within GCIS, though informally and/or in the absence of formal

arrangements to institutionalise the practice. The process, structures, tasks, technology and people explored in this literature bears relevance to what has been informally entrenched as a practice within GCIS. While a number of key themes were explored in this literature, such as community of practice, globalisation of KM and evolving organisational culture, to cite a few, it is prudent to stress that organisational leadership is critical in ensuring that the practice is institutionalised to move organisations to further heights. The next chapter deals with the research methods employed to gather data.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter outlines the research approach used in investigating the research questions outlined in chapter one. Leedy and Ormrod (2001:4) defines research as "systematic process of collecting and analysing information (data) in order to increase our understanding of the phenomenon about which we are concerned or interested". Research methodology is "an exposition of a plan on how the researcher decided to execute and address the formulated research problem" (Babbie, 2005:6). The purpose of this research was to explore the existence of KM practice within GCIS, with the overall objective being to examine the extent to which the abundance of available information can be communicated to relevant stakeholders. The KM focus should therefore address the retention and use of institutional knowledge when loss of skills is experienced through workers' mobility.

This chapter describes the research methodology pursued in addressing the research questioned proposed. Attention was given to the research approach and the administration of the data instrument.

## 3.2 Research approach

The type of research approach used in this study was exploratory. Qualitative approach is discussed by Leedy and Ormrod (2001, 147) who argues that they have two things in common: "focusing on a phenomenon that occurs in natural settings" and also that "they involve studying those phenomena in all their complexity". This paradigm excludes the researcher being responsive to the circumstances and the unit under investigation.

Leedy and Ormrod (2001) argues that this approach has the ability to provide complex textual description of people's experience, which includes amongst others contradictory behaviours, opinions, emotions and the relationships of individuals. Thus, intangible aspects of any social setting can be uncovered through this method. Although this method is prone to a researcher's bias in design, data collection and credibility of sources or subjects used in influencing the study's outcome, the researcher ensured that most aspects of what could compromise the credibility of the study were looked at and reduced for the findings to be credible. Henning, Van Rensburg and Smit (2004) argue about "good craftsmanship" on the part of the researcher in order to arrive at credible findings and reliable outcomes. Throughout the study, the researcher ensured that all checks and balances were provided for to ensure that credibility of the study was maintained.

The researcher used the questionnaire and structured in-depth interviews in order to obtain a comprehensive understanding of elements of KM practices in GCIS. From the responses, the researcher identified key concepts and themes for analysis. The researcher arranged the themes systematically. Qualitative analysis was applied to explore and describe the phenomenon as it exists and put in place measures that could be pursued to change the ways things are for the better. Babbie (2005:388) argues about cross-case analysis. These analyses can either take a variable-oriented or case-oriented approach. For the purposes of this study a case-oriented analysis was adopted.

### 3.3 The case study

The research was a single case study in order to engage in an in-depth examination of organisations. As a new concept in South Africa's public sector, this exploration was meant to create awareness, need, organizational change management and also instigate a creation of synergy with communication and information systems government-wide so as to enhance the communication and information management capacities of all government departments.

Insights drawn from the case study were intended to promote or inform practices in similar situations especially the view that delivery of correct information at the right time to relevant individuals requires a knowledgeable individual (Leedy, 2005). Various stakeholders, which GCIS receives information from, was streamlined systematically to ensure a uniform approach in government communication of information to intended stakeholders. The study used an inductive approach as an appropriate technique for data collection. The researcher examined KM practices for their relevance to institutions, for example, in facilitating communication of government information, policies designed for implementation, and their marketability to the global community. The researcher assessed whether systems, structures, technology, processes and people were for the KM practice to materialise.

Although a case study approach is sometimes viewed as a weak method of social science research as it focuses on one or few aspects of a social phenomenon, it is an acceptable methodology (Babbie, 2005). As an acceptable and widely applied methodology, its significance lies in its in-depth approach because of its role in uncovering a particular phenomenon (Babbie, 2005). Leedy and Ormrod (2005) argues that a case study was suitable for learning more about a little known or poorly understood situation. GCIS was chosen because of its strategic location at the Office of the Presidency and because of the central leadership role it plays in meeting the "communication and information needs" of South Africa (GCIS Document, 2003).

In the GCIS Annual Report 2003-2004, Mr J Netshitendzhe, chief executive officer of GCIS highlighted three key areas in which the government capacity requirement was needed in order to meet the communication challenges of government: Firstly, broadening access to government information and more broadly to the means of receiving and imparting information and ideas; secondly, strengthening the government communication system, and thirdly, building communication partnerships with stakeholders (Pere and Naidoo, 2001). For Netshitendzhe, the government communication and information system had a

significant role to play in consolidating democracy, which then improves growth and development (GCIS Annual Report, 2003/2004).

### 3.4 Research sample

A sampling procedure was carefully planned by the researcher to ensure that population selected is representative of the population. The researcher opted for a non-probability sampling method to select respondents for this study. According to Leedy and Ormrod (2001:219) this type of sampling is sub-categorised as purposive sampling and respondents are selected for a particular purpose as they have diverse perspectives on an issue.

Participants were from GCIS national office in Pretoria. They were all full-time employees of the institution. For in-depth interviews, the five employees were from within middle management level, such as assistant directorship and deputy directorship. Only one female employee was interviewed; the others were males. The 18 respondents to the 30 questionnaires distributed cut across the gender divide of the sample. In sample selection, the researcher had two considerations: resource-based issues and focus on specific issues, phenomena and processes around the organisation in question. The purpose for this selection was to have a population which would assist in providing data related to the research questions.

### 3.5 Data collection techniques

Data collection process influences the quality of data collected. In social research various methods of data collection can be pursued, determined by resources at the researcher's disposal. For the purpose of this research, questionnaire and purposeful semi-structured interview was used to collect data. Silverman (2005:149) argues that an interview is a purposeful endeavour wherein conversation between the interviewer and the interviewee are set to address a stated research questions. This form of interview provides the researcher with consistency when addressing the research question.

A degree of flexibility and creation of a rapport between the interviewer and interviewee to ensure that there is openness in the conversation was cleared by the researcher in order to ensure that as much data as possible was acquired. The researcher noted that a drawback of circulating a questionnaire to respondents was that from the sample of 30 selected, not all will respond or return the questionnaire. However, from the 30 chosen, 18 respondents returned the completed questionnaire. Leedy and Ormrod (2001:197) emphasised that the significance of this method was that respondents are more truthful than when they are engaged in a personal interview, particularly when they are interviewed on controversial topical issues. Nonetheless, Leedy and Ormrod (2001:197) further argues that the responses that come with a questionnaire reflect "the reading and writing skills and, perhaps their misinterpretation of one or more questions' could be exposed."

In this study, the advantages of using both questionnaire and in-depth interview outweigh the disadvantages, hence both techniques were selected. Thus, the questionnaire and the in-depth interview was developed using the research questions as a guide.

### 3.6 Data analysis

Open- ended questions were analysed by a process of content analysis. "Content is the study of the recorded human communications" (Barbie, 2005:328). According to Barbie, undertaking content analysis assists in coding essential information during the process of transforming raw data into a standardised form. With the data collected through a questionnaire, data was analysed statistically. Responses were analysed in terms of percentage of respondents choosing each option provided. McMillan and Schumacher (2006:364) argue that "qualitative data is primarily an inductive process of organising data into categories and identifying patterns among categories." In this instance, the researcher made sense of what was collected in line with the research question stated in chapter one. In this study different chapters were put together regarding data presentation and

analysis. Data categorisation was organised and coded in line with the themes drawn from the research questions. The data gathered were not used to critique the KM methods, procedures, structures nor systems in place but to discover how all these were put together by the unit of the organisation to enable institutionalising of the practice.

According to Silverman (2005:162), data analysis should not only happen when all data has been safely gathered. The researcher started the data analysis process with the gathering of information from primary (e.g. interviews, questionnaires) and secondary (e.g. textbooks) resources gathered from libraries, websites and source documents from GCIS. Data analysis seeks to transform data gathered into research findings which bears some relation to what the study seeks to achieve. Thus, the researcher packaged the responses that share similarities from the different questions into groups and analysed them together to minimise repetition. Lewis-Beck (1994:254) further explains that "words, phrases, or other units of text classified in the same category are presumed to have similar meaning." Therefore valid inferences from the text must be developed through a classification procedure that is reliable to ensure consistency.

### 3.7 Research strategy

The strategy for this research design pursued the following direction. Firstly, the deputy director for resource centres made available to the researcher a general scrutiny of all relevant documentation such as information and library centres. Secondly, observation of the Information Centre and Library Centre and the office structure of the Knowledge and Information Resource Centre directorate. Thirdly, submission of 30 questionnaires was made to the researcher's contacts (Deputy Director Resource Centre) at GCIS for distribution to staff within the various units of the organisation. In order to ensure that bias did not encroach in the distribution of the questionnaire, the researcher inquired about the number of respondents that comprised the directorate. Fourth, the Deputy Director Resource Centre within GCIS circulated the questionnaire to respondents after consultation making arrangements with the researcher on the delivery date of the questionnaire to the

chosen respondents. Fifth, the questionnaire was framed to establish a general understanding of KM practices from respondents and lastly, questions were first given a trial run before data was collected. The trial run involved the researcher's supervisor, four fellow students and two senior students to check on the balance and intended data collection for which they were designed was conducted.

The main contact person in GCIS also had the opportunity to examine and reflect on the questionnaire and interview questions before data collection was conducted. The following sections were included in the questionnaire design: Knowledge Management; Organisational Culture; Information Management; Organisational Strategy and Demographics.

The questionnaire was designed to provide the researcher with the general understanding of the respondents in their respective delivery units; their perceptions of KM and Organisational Culture; their roles in the various delivery units; and their self-reflection within organisational context. Interview questions were designed to gather information around KM. Five members of the middle management level of the organisation were selected as interviewees.

The interviews were exploratory and in-depth, and they comprised both semi-structured and unstructured questions. All interviewees were asked the same prepared questions. Clarification was provided where interviewees needed it.

This research focuses on the human base asset of GCIS and all tools and organisational structures that characterise it. It explores GCIS, to help bring about substantial changes to organisations by sensitising relevant institutions about the importance of the Knowledge Management approach to communication and information management systems. As qualitative research (Leedy and Ormrod, 2005) argued that it was significant to reveal an issue in a comprehensive form because of the variety of magnitudes and layers which a subject takes. It was the researcher's prerogative to ensure that social reality was critically understood and analysed using the instruments at his disposal.

Babbie and Mouton (2001:270) argues that qualitative research attempts to study human action from a social perspective with a primary goal of "describing and understanding rather than explaining human behaviour". Mouton further argues that in qualitative research, one should try to see things or the world in the eyes of the participants themselves. The researcher deduces theory from the data collected (Browne, 2004). This research explored the actors within an organisational setting. Representivity within the various units of the organisation was encouraged to help reveal their various perceptions about the organisation of which they were employees.

### 3.8 Reliability and validity

The outcome of research study has a potential problem of reliability and validity. Babbie (2005:323) argues that a researcher must decide whether to observe a phenomenon as "an outsider or as a participant, whether or not to identify yourself as a researcher, and how to negotiate your relationship with the subject". Resolving such issues has great influence in the validity and reliability of the research findings. Patton (2002:1) explains reliability as a means of finding consistency on data when similar instruments or procedures are used at different times. Validity is concerned with achieving what the researcher set out to measure as a researcher.

The reliability and validity of this study was advanced through triangulation. This involved the use of multiple data sources as well as a mixture of data collection methods to ensure accuracy of information gathered. Taking into account that no single method could solve the research problem because of its proneness to error, the researcher used triangulation to minimise biases and preferences in the interviews. Although limitations could arise as a result of the data collection setting, the behind-the-scenes work and document analysis assisted greatly to ensure credible results emerged from the study.

The Knowledge and Information Management Centre was identified as the Directorate competent to respond to the research questions prepared for the organisation. The contact person, Deputy Director Knowledge and Information Management Contact Centre, advised the researcher on the tightness of the schedule as quite a number of personnel had to go out into the field. Thus, a schedule was made with those who were available to be engaged on the interviews. For in-depth interviews, interaction was biased towards the middle management team. The basis of targeting such a team was merely based on the desire to get in-depth views on resources which also take part in operational decision-making of the organisation. In addition, the time allocated for an individual interviewee was 40 minutes. Interviews were conducted in one of the boardrooms of the institution. In spite of this rather regulated interview environment and time constraints, the researcher appreciated the quality of responses, their willingness to be interviewed, and interest in KM practices. Since getting permission took time because of unavailability of senior staff within the institution to approve the process, the allocated time with the available staff was used to its maximum.

In an effort to test reliability which is equivalence, stability and internal consistency before and after data was collected; the collected data was tested against the trial run which was initially conducted to verify consistency in the responses of the respondents. This process is confirmed by McNiff and Whitehead (2006:159) when they said that it is permitted to recruit new people drawn from one's professional circle or people not directly involved in the research or an interested outside observer and this group must be competent to offer educated feedback. They further stressed that these people must be well-informed and hold reasonably unbiased opinions. This view is corroborated by Henning, Van Rensburg and Smit (2004:149) who stress the need to "ask other people especially research participants" whether they agree with the researcher's data. This process was followed through with few individual interviewees as well as fellow students who were asked to assess main arguments brought by the participants when interviewed.

### 3.9 Limitations of the research

The study, like any other study preceding it, sought to understand the prevalence of KM practice in a public sector institution such as GCIS. The goal was to confirm or negate the view that KM practice is minimally practiced at best or there is unimpressive progress in advancing its implementation as alluded to in some literature explored during the literature review.

While the focus of this research was on the people and the resources they use to create knowledge, these could not be fully explored due to the fact that parameters have to be guided by the operational dynamics of the institution. The researcher lacked a well-informed base for the operational activities of the institution. This compromised the researcher's ability to manage proceedings of the research the way the research strategy had been envisaged. The delay in the granting of permission to undertake the research and unavailability of senior members of the organisation due to work commitments denied the study a voice from leadership level of the organisation in spite of the blessing they gave the study when approval was granted. Given the respondents that were available to provide data for this study, the researcher found them as credible sources as they were closely linked to the subject in question. However, it should be recognised also that the fact that the researcher was an outsider might have stimulated interest on the subject and prompted the respondents to open up in their responses to interview questions. Lack of access to some of the identified key respondents to the interview should also be noted as another limitation of this research. However, access to an increased number of middle management respondents who were involved with the subject that was investigated was considered sufficient to provide credibility to the study.

The researcher used English in this research while recognizing the fact that South Africa is a multicultural society with eleven official languages. Few of the respondents used English as their mother tongue. This limitation on individual expression should also be acknowledged. The researcher is of the view that

communicating in the language of the employees' choice should have assisted in sourcing volumes of information due to the fluency and confidence as regards self-expression.

### 3.10 Ethical considerations

In order for the respondents to open up to the researcher and provide information in both the questionnaire and interviews, confidentiality of the information gathered was ensured. Fraenkel and Wallen (1990) stressed that nobody has to have access to data gathered by the researcher. He further argued that names of respondents should be removed from all data forms used in collecting the information to maintain their anonymity. This view is corroborated by Babbie (2005:64) who argued that "the clearest concern in the protection of the subject and their wellbeing is the protection of their identity". As an outsider asking questions about information and communication at Pretoria's GCIS it was almost inevitable that the researcher should be treated with suspicion. The researcher sought permission from the Director for Human Resources. Through directives from the office of the deputy CEO, permission was granted. The researcher made an informal presentation on KM practices, it being a new concept, and non-existent in targeting the institution. While an informal engagement with an internal contact within the institution had built positive groundwork, getting formal permission to conduct interviews and distributing questionnaires took three months.

The respondents were informed of the purpose of conducting this research in their institution and that they had rights to withhold or withdraw their participation should they consider it unnecessary to provide the information requested by the researcher. Background was laid to the effect that respondents were aware of their role in the whole proceedings of the research project.

## 3.11 Summary

This chapter outlined the methodology which the researcher pursued to gather data/information from the respondents. A qualitative approach was used with case study being the departure point using questionnaire and in-depth interview as two instruments to gather information. These instruments both allowed for gathering specific and in-depth information about the institution and in particular the subject being studied. This provided an opportunity to the researcher to have an understanding of where the institution is regarding KM and what direction needs to unfold to get to an ideal environment of KM practice as revealed by the literature. The next chapter will be focused on the presentation of research findings.

# CHAPTER FOUR

# PRESENTATION OF RESEARCH FINDINGS

## 4.1 Introduction

The preceding chapter discussed the research methodology, data collection instruments and the participants who were selected for this research. This chapter intends to presents the research findings from the data collected through questionnaires, interviews, observations and literature study. The research findings were used to answer the research questions as well as to determine the manner in which KM can be institutionalised within the organisation to ensure communication of government policies, delivery of services and addressing the mobility of skilled workers and scarce skills challenges across government. These can be addressed in a manner that eases ineptness in the delivery of social services. The use of the stated data collection methods was intended to increase the validity as the strength of one approach can compensate for the weakness of the other. The researcher presented the findings gathered from the questionnaire followed by findings gathered from interview questions conducted.

## 4.2 Background

In order to answer the research questions, questionnaires and interview questions were developed. With the assistance of Deputy Director Information and Knowledge Resource Centre within the organisation, the researcher circulated questionnaires to all respondents in advance. The purpose for distributing questionnaires in advance was intended to provide the respondents with ample time to familiarise themselves with the questionnaire and then respond accordingly after applying their minds. A set of research questions was formulated to engage five selected respondents in a face-to-face in-depth interview. The table below highlights the overarching research questions as well as the specific data collection method that was used to address the research question.

**Table 1: Research questions**

| Research Questions | Data Collection Methods |
|---|---|
| What is the understanding of KM practice within GCIS? | Questionnaire, interview (semi-structured), observation (anecdotal records and institutional physical design of key performance units) and literature study |
| What are the systems and processes in place that the institution has used to see through the implementation of KM? | Questionnaire, interview (semi-structured) and literature study |
| What are the internal arrangements within GCIS inhibit and/enables the implementation of KM? | Questionnaire, Interview (semi-structured) and literature study |

Source: Own, 2012

### 4.3 Presentation of organisational data from questionnaire responses

#### 4.3.1 Response rate

The response rate from middle management and/or other staff targeted for this data gathering exercise was acceptable. Thirty questionnaires were issued out to the organisation to gather information based on the main research questions. A total of 18 questionnaires were received which represented a response rate of 57%.

Taking into account the above average response rate by respondents targeted, the quantity received was considered reasonable to generate an informed view around KM practice, considering that a section in a Chief Directorate was targeted for the purpose of research (staff dealing with use of institutional knowledge). Thus, the response rate was considered very satisfactory for the purpose of the study. This view was against the background that in-depth face-to-face interviews with five respondents were already scheduled and agreed. While a lot of personal

information as stated on the research questionnaire was not provided for, as observed on the returned questionnaire responses, questions linked to the main research questions of this study were responded to. All replies received created room for data analysis to be initiated.

### 4.3.2 Sample description

The sample consisted of 18 respondents derived from the 30 initial targets from the middle management level of the branch within GCIS. Questionnaires were sent to all staff from middle management and support specialist staff. Interviews were targeted at Deputy Directors and Assistant Directors. For naming purposes in terms of the responses received from the participants (questionnaire responses): A, B, C, D, E, F, G, H, I, J, K and L were used for purposes of identifying responses received.

### 4.3.3 Organisational understanding of KM

The purpose of this research was to explore the understanding of respondents within GCIS about their views on the subject of KM. The responses from the various data collection instruments were collated to obtain the patterns of how the respondents reflected their understanding of KM within their organisational setting.

#### 4.3.3.1 Data presentation from questionnaire responses

It was often helpful when looking at data to identify the trend - essentially what was happening to the data gathered. Trends were monitored on how quickly they changed. From this data gathered through questionnaires, analysis presented a condition in which patterns were established for analysis. Discussions followed along the themes or issues commonly observed from the responses.

#### 4.3.3.1.1 Respondents understanding of KM.

Varied responses were received from respondents outlining their understanding of KM. Amongst the participants of this data collection method (questionnaire), mixed responses were received on their understanding of KM. Respondent C, for instance, argued that "KM is a multi-disciplinary approach to accomplishing organizational objectives by making knowledge accessible to the people in the organization through surname of people, technology and content. On the other hand, respondent H argued that "KM is the gathering, organizing and storing and experience of individual workers and groups within an organization and making this information available to others in the organization. Respondent D defined KM practice as "effective gathering, analyzing, storage and use of information and feedback for improvement" of organizational performance.

In corroborating respondent D, respondent B argued that KM "is the preservation of knowledge that GCIS produces in the form of documents, skills and people". Respondent E argued that KM practice refers to "how an individual interprets patterns of information and how this knowledge can be used for future decisions. Respondent J argued about the "management of both tacit and explicit knowledge, which are shared within a specific environment". Respondent A stated plainly that KM was "the management of information available in an organization". The view of the respondents stated above centred on generating, organizing, storing and use of organizational information.

The reflection of the abovementioned respondents did not generate information and/or meaning of KM around the following areas: meaning of KM in an organisation; purpose of KM practices and location of KM in an organisation. Other respondents who reflected their views on their understanding of KM centred their views on the generation of intellectual property for the organisation. Their responses were captured as follows: Respondent A argued that KM was the "identification, implementation and management of intellectual property in the workplace for better performance". Respondent K confirmed the above argument

by stating that KM was "systemic and coherent organisation of intellectual capacity, referred to the gestalt concept of the sum of being more than the parts". Respondent L outlined an understanding of KM practice as "management of intellectual resources of an institution or individual for that matter. It includes the utilisation and archiving of information and data as well as the dissemination of such information". The views of the respondents as outlined above reflected acquisition, storage, sharing and retrieval of organisational information which is key to organisational performance and growth.

#### 4.3.3.1.2 Existence of KM Policy within GCIS

In ensuring that knowledge management practice happens in an organisation, fundamentals need to be put together. In this case, checking the availability of a policy within the organisation reserved attention. Table 2 shows that most respondents agree that there is KM Policy in place within the organisation. A numerical value of 100% of respondents confirmed the existence of KM policy (questionnaire response, March 13, 2006).

**Table 2: KM policy statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 18 | 100% |
| No | 0 | 0% |
| Unknown | | |

Source: Own, 2012

#### 4.3.3.1.3 Place for institutionalisation of KM.

In managing KM practice a formal structure needs to be put together that would ensure that the practice was entrenched and start benefiting the organization. When respondents were asked to respond to the need for institutionalization of the practice, a number of 100% of the respondents in Table 3 below agreed that

institutionalization of the practice could help the organization move forward (questionnaire response, March 13, 2006).

**Table 3: Institutionalisation of KM statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 18 | 100% |
| No | 0 | 0% |

Source: Own, 2012

#### 4.3.3.1.4 Accessibility of institutional explicit knowledge.

For knowledge management practice to happen, structures, processes and technology need to be in place. The respondents reflected in their response about the availability of infrastructure for repository of organizational information. When asked to respond to the availability of explicit knowledge, respondents varied in their response with 67% of the respondents shown in Table 4 below agreeing that access to institutional explicit knowledge was provided for by the organization. However, a number of 33% of the respondents could not affirm the availability of explicit knowledge within the organization (questionnaire response, March 13, 2006).

**Table 4: Institutionalisation of explicit knowledge statistics**

| Item | Frequency | % |
|---|---|---|
| Yes | 12 | 67% |
| No | 6 | 33 |

Source: Own, 2012

### 4.3.4 Organisational culture

Respondents were requested to provide information which talks about the organisational culture in which they exist. In order to establish what kind of

organisational culture exists within GCIS, some of the questions asked follow hereunder together with detailed responses provided in Table 5 below.

#### 4.3.4.1 Platforms for information access

**Table 5: Platforms for information access statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Available platforms provided by GCIS ( library, newspaper, intranet, internet & magazines | 18 | 100% |
| Others | 0 | 0% |

Source: Own, 2012

While noting the significance of human element in institutionalisation of KM, the availability of structures and technology is key to consider. In this instance, respondents agreed as reflected in Table 5 above that a numerical value of 100% respondents showed that platforms for information access were available (questionnaire response, March 13: 2006).

#### 4.3.4.2 Platforms for information sharing

Respondents provided a comprehensive overview on the availability of information platforms. Varied responses were provided for by the various respondents in Table 6 below. A numerical value of 83% argued that they share information stored in a shared drive. Another group of respondents argued that they post their information on an Intranet. A numerical value of 44% confirmed posting their information for organisational access on the Intranet. Others stated how they share their research findings for work they do for the organisation. A small number of 27% indicated that they share their research work through email distribution. Despite these reflection platforms for information sharing, a small percentage indicated that they do not know about the existence of information sharing platforms. A numerical value of 17% stated that they did not know of any

platforms for information sharing within the organisation (questionnaire response, March 13, 2006).

**Table 6: Platforms for information sharing statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Store through group drive | 15 | 83% |
| Posting information on Intranet | 8 | 44% |
| Email distribution of research findings through chief directorate | 5 | 27% |
| Do not know | 3 | 17% |

Source: Own, 2012

#### 4.3.4.3 Description of the organisation to a newcomer

**Table 7: Description of the organisation to a newcomer**

| Item | Frequency | Percentage |
|---|---|---|
| Nothing to say about it | 6 | 33,3% |
| Warm friendly environment | 2 | 11,1% |
| Young and advanced with bright ideas | 1 | 6% |
| It's a government strategic communication leader | 1 | 6% |
| Centre for development of young minds | 8 | 44,4% |

Source: Own, 2012

The respondents were varied in their approach to this question. Respondents who did not provide any description of the organisation to a newcomer constituted 33, 3% of the respondents. Those who argued that the organisation was a warm friendly environment constituted 11, 1%. Those who said that the organisation is 'young and advanced with bright ideas' and 'that it is a government strategic communication leader' collectively constituted a numerical value of 12% (6% each). Those who argued that the organisation is the centre for development of young minds constituted a numerical value of 44,4% (Questionnaire response, March 13, 2006).

#### 4.3.4.4 Frequency in holding of formal meetings

**Table 8: Frequency of holding formal meetings**

| Item | Frequency | Percentage |
|---|---|---|
| Regularly/daily | 4 | 22% |
| Once a week | 14 | 78% |

Source: Own, 2012

When it comes to the regularity of holding formal meetings, varied responses were received. A numerical value of 22% confirmed that they hold their meetings

on a daily basis. However, a number of 78% of respondents stated that they hold their meetings once a week (questionnaire response, March 13, 2006).

#### 4.3.4.5 Regularity in holding of informal meetings

As depicted in Table 9 below, when it came to frequency of holding informal meetings, responses were varied. Those who held informal meetings on a daily basis were a numerical value of 22%. Another group of respondents reflected a numerical value of 55%, and 6% confirmed that they held their informal meetings once a week. Those who held their informal meetings as and when the need arises comprised of a numerical value of 22% (questionnaire response, March 13, 2006).

**Table 9: Regularity of holding informal meetings statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Daily/regularly | 4 | 22% |
| Once a week | 10 | 55,6% |
| Occasionally/as a need arises | 4 | 22% |

Source: Own, 2012

#### 4.3.4.6 Team composition during Izimbizo outreach programme when accompanying the president

The majority of the respondents to this question stated that this is not their area of competency to decide on GCIS resources who accompany the president on Izimbizo road shows. One respondent at the Deputy Director (Respondent L) level stated that the responsibility lies with another Chief Directorate.

#### 4.3.4.7 Information sharing and delivery with other departments

Respondents varied in their response to this question. Most respondents focused mainly on departments within GCIS. Respondent L for instance alluded to the fact that their relationship with other government departments is very good. They

share knowledge using the central database to retrieve whatever information they want. Four other respondents alluded to the fact that internally, various departments join forces led by a chosen individual junior in ranking to lead on project-related work. Most research initiatives and reports are shared internally between departments within the organisation. Two respondents J and K indicated that this does not apply to their area of work.

#### 4.3.4.8 Institutional capacity to create knowledge

Regarding institutional capacity to create knowledge, the responses were varied. A numerical value of 83% of the respondents agreed that the organisation creates knowledge for the organisation. However, a number of 17% of the questionnaires received did not have responses to this question (questionnaire response, March 13, 2006).

**Table 10: Institutional capacity to create knowledge statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 15 | 83.3% |
| No | 0 | 0 |
| No response | 3 | 17% |

Source: Own, 2012

#### 4.3.4.9 Drivers for successful implementation of the vision and business objectives of the organisation

From the 18 questionnaires received from respondents, not many could articulate as to what drives GCIS to live up to its mandate of delivering on its vision and business objectives. Eight respondents chose to reserve their comments on the question. Of the few that commented, respondent A stated that "GCIS Corporate Strategy and the National Communication Strategy are forces around which the vision and business objectives of GCIS pivot". Respondent E alluded to the significance of the Management Reporting Tool as a key driver to GCIS's focus

on its delivery objectives. However, respondent F stressed that "People's need, service delivery obligation and Batho Pele principles" instil a desire for the organisation to live up to the mission and business objectives it set out to realise.

#### 4.3.4.10 Role in generation of documents

**Table 11: Role in document generation statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 13 | 72% |
| No | 5 | 18% |

Source: Own, 2012

Regarding the generation of documents within the organisation, a number of 72% of the respondents agreed that their work involves generation of documents. However, a numerical value of 18% of the respondents stated that their work did not include development of documents for the organisation (questionnaire response, March 13, 2006).

#### 4.3.4.11 Role in conducting of skills audit

As reflected in Table 12 below, responses on the conduction of skills audit varied, with a number of 39% indicating that one amongst their roles is that of conducting the skills audit. However, a numerical value of 28% of the second pool of respondents indicated that conducting of skills audit was not part of their skills audit. A numerical value of 33% of the questionnaire came back without responses from the respondents (questionnaire response, March 13, 2006).

**Table 12: Role in conducting skills audit statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 7 | 39% |
| No | 5 | 28% |
| No response | 6 | 33% |

Source: Own, 2012

#### 4.3.4.12 Prevalence of scarce skills resource within the organisation

**Table 13: Prevalence of scarce skills resource statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 12 | 67% |
| No | 0 | 0 |
| No comment | 6 | 33% |

Source: Own, 2012

When it comes to the knowledge of scarce skills within the institution, a number of 67% of the respondents highlighted the availability of scarce skills within the organisation. However, a number of 33% of the questionnaires were returned without comments on the question (questionnaire response, March 13, 2006).

#### 4.3.4.13 Experience in the loss of skilled personnel by the organisation

**Table 14: Experience in loss of skilled personnel statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 16 | 89% |
| No | 0 | 0 |
| No comment | 2 | 11% |

Source: Own, 2012

Loss of skills has been an endemic problem for not only the government but also many companies within South Africa. When it came to responding to this

question, a number of 89% of the respondents indicated that the organisation experienced loss of skills. However, a numerical value of 11% of the respondents did not comment on the organisation's experience of loss of skilful individuals (questionnaire response, March 13, 2006).

#### 4.3.4.14 Implementation of learnership programmes by the organisation

GCIS, as with many other departments, provides experiential learning for talented young people. In their response to this question, 89% of the respondents stated that learnership programmes were conducted by the organisation, and 11% of the returned questionnaires came back without comments (questionnaire response, March 13, 2006).

**Table 15: Implementation of learnership programmes statistics**

| Item | Frequency | Percentage |
|---|---|---|
| Yes | 16 | 89% |
| No | 0 | 0 |
| No comment | 2 | 11% |

Source: Own, 2012

## 4.4 Knowledge creation

### 4.4.1 Presentation of responses from interviews

Five respondents were identified to participate in an in-depth interview. Selection of these participants was guided by their availability and through assistance from an internal contact, Deputy Director Information and Knowledge Centre. The interview questions were structured in a manner that seeks to assess how the organisation creates knowledge through its activities which then assist in communicating properly all initiatives which government was driving through the various departments.

#### 4.4.1.1 Prevalence of formal arrangements for KM practice

Respondents were required to provide in-depth information about any initiatives to institutionalise KM practices within the organisation. In line with its communication efforts of government information to intended recipients, the first respondents (interview, March 13, 2006) stressed that "GCIS render publication service for Home Affairs. We write government acts using simple language. In the process we complement what other departments are doing". Through the process of assisting departments such as Home Affairs, a knowledge base for both the organisation and a government department such as Home Affairs is thus created. The second respondent (Interview, March 13, 2006) further emphasised that GCIS assists other government departments in formulating communication strategies. This respondent said that GCIS "is centrally recognised as a communicating department". Thus, it helps other departments to develop their own communication strategies. For government policies, practices of centralising government communications and messaging allow uniformity and adherence to a set standard of reporting. This curbs misrepresentation of information when different communicators are allowed to communicate the same message at different levels.

The third respondent (Interview, March 13, 2006) in an effort to be precise in responding on the role of the organisation in knowledge creation stressed that officers in this institution saw themselves as communicators of government information. They conceive of GCIS as "the government's communication wing". Thus, the institution does not generate information but was fed information from various organs of state and/or government. It passes on information to its intended recipients. The respondent further argued that when information is transmitted consistently from the top of a hierarchy, the amount of information can be regulated and the significance of each message can be made clear. However, when information is coming from a range of officials and unofficial networks, each member of the organisation is liable to suffer from communication overload and the significance of such information becomes ambiguous, particularly when the

messages contradict each other. Therefore, the role of GCIS was to facilitate centralised government communication. The other role of GCIS was to develop communication materials in simple language which are easier to understand. This service is also extended to the simplification of government laws and regulations using the language that the broader community uses and understands. While assisting other government departments to move swiftly between communities in their service delivery endeavour, GCIS also provides assistance in an information-gathering exercise. The fourth respondent (interview, March 13, 2006) stressed that GCIS generates information from other government departments. While not confusing its role of ensuring that it monitors and co-ordinates government communications, the information-gathering exercise was considered key for the organisation.

In this instance, the fourth respondent (Interview, March 13, 2006) stated that there is an information-gathering exercise which is factored into the Izimbizo process. The respondent argued that Izimbizo "is the process where government led by president/ministers moves about interacting with a wide cross-section of the people of South Africa, listening to their concerns, raising their problems regarding service delivery and how the people can work with government to create better conditions for their livelihood." According to the respondents, this initiative is a community outreach programme where communities are given platforms to raise their concerns on service delivery issues to political heads of government departments. This process assists in generating information which helps the government to know and see the plight of the poor people and then institutes mechanisms to re-orientate government policies towards addressing the needs. This exercise, the fourth respondent (interview, March 13, 2006) argued, assisted in creating a knowledge base around which government policies can be orientated towards meeting and/or closing the gap where service delivery is short changed.

With regard to the organisation's programme delivery, respondent five (interview, March 13, 2006) stated that there was a Project team which was "responsible in

the identification of projects and programmes which other departments are doing. This involves co-ordinating these programmes so that clashes do not occur and avoiding duplications of projects between departments. As an office which also generates and co-ordinates government-wide policies, information generated assists in creating an understanding within government that the policies that go through them are implemented correctly through these projects and programmes that they monitor from other departments". The respondent further highlighted the significance of GCIS within the Communication of Government. Respondent five (Interview, March 13, 2006) further stated that " Communication clusters formed from coming together of five clusters from various government departments, meeting on a monthly basis to synergise their communication of government programmes."

The third respondent (interview, March 13, 2006) corroborated the organisation's generation of information and thus creating a knowledge base by stating three agencies which play a key role in generating information for communication purposes. The respondent argued that institutions such as the Media Development and Diversity Agency (MDDA), the Multipurpose Community Centres (MPCC), the GCIS Information Centre and the International Marketing Council (IMC) were created to assist in the generation of information between government and all relevant stakeholders who would then assist in enhancing policy implementation and the economic and social development of the country. The respondent stressed that formations/initiatives, particularly Izimbizo road shows, MPCC and the GCIS Information Centre play a major role in assisting the people to air their views on issues that affect their lives. This has also assisted in the compilation of concerns, thereby assisting the government with strategies for responding to people's concerns.

While taking note of the various structures/initiatives that assist in generating knowledge for the organisation, it should also be noted that the organisation evolved from the South African Communication Services (SACS). The new organisation was re-constituted with a high number of younger personnel with the

aim of taking transformation challenges forward. The first respondent (interview, March 13, 2006) stated that within a 'period of six months, a lot of people come and go" within the organisation. The majority of these people are young and generate a lot of energy towards the development and growth of the organisation. With a lot of young people coming through the ranks, the organisation "trains a lot of people with few individuals sharing their new acquired skills and knowledge". This state of affairs leaves the organisation at a loss and makes investment in training a futile exercise.

The first respondent corroborated this argument by stating that a lot of young people who come through the system seek new challenges in the private sector. The respondent lamented the fact that "when you train people, you have expectations of how they need to behave after training. This has a negative impact on the retention of knowledge, which is vital for organisational development and for the growth of knowledge" (Interview, March 13, 2006). While much knowledge is generated by the organisation, mobility of skilled employees, particularly young people who seek more challenging environments, create a mockery out of development initiatives as a lot of what they acquire is not stored elsewhere for retrieval, particularly tacit knowledge.

### 4.5 Integration of IT operations in KM

The government is a strong investor in Information Systems (IS) and Information Communication Technology (ICT) because of the role it has in supporting the diverse range of planning, service delivery activities and key record-keeping processes. The various respondents interviewed noted the significance of ICT in their business activities. Respondent one (interview, March 13, 2006) indicated that many of their processes are web-based. Information is stored in the organisation's intranet and Internet is provided for people to access information.

A fourth respondent enhanced what respondent one said by stating that most of his work activities are Internet-based. The respondent further alluded to that fact that

the project desk stores all requests and communication strategies on the intranet. "GCIS handles about numerical value of seventy percent 70% of government communication and this requires a well-co-ordinated system in place" (Respondent four, interview, March 13, 2006). He, for example, is required to respond to more than 200 e-mails a day. Thus, applications are required to be in full operation for most of the time for e-government to be implemented by most government departments.

### 4.6 Performance management and innovation

Respondents in this area indicated the importance of innovation within the organisation. The process of converting knowledge and ideas into a better way of doing business, in order to enhance efficiency and effectiveness, has been a serious challenge to the organisational culture. A number of respondents endorsed the culture of innovation. For instance, it was indicated that, "directorates make their own budgets and decide how best to utilise the money budgeted for" (Respondent two, interview, March 13, 2006).

The fifth respondent (interview, March 13, 2006) said that through the performance management system, people are encouraged to give their best performance in ensuring that project objectives under their control are realised. "Incentives, which are built on performance management system, make employees creative in the execution of their duties:" (fifth respondent, interview, March 13, 2006). Respondent four (interview, March 13, 2006) said "when working on campaigns, assessing which media and logo can we use as an institution, we draw people from different sectors to come with their own initiatives."

Through what respondent four highlighted, emphasis was laid on the creation of a platform for knowledge creation and sharing within the organisation. In further elaborating his point around working in teams on a particular campaign, respondent four (interview, March 13, 2006) alluded to the fact that innovation

from individual people who are given platforms to lead these working teams always comes out. This according to the respondent creates a culture of sharing and participation within an organisation.

### 4.7 Knowledge repository

For GCIS, KM includes the understanding of the people within the organisation and their experiences in the line of duty. This includes the documents and reports that they prepare. Understanding the social, organisational, leadership and technological imperatives of the institution as regards the location of knowledge is crucial. The organisation developed its own website so that its information can be made available. The GCIS databases store all information, which the institution generates. In this regard, the first respondent (interview, March 13, 2006) said: "When officers leave, there is an exit interview. What people have told you are noted somewhere. IT support specialist is responsible for management of knowledge. IT is a tool we use to enhance information management within our database. We have software, which we use to manage information. Information Management Specialists design the field. The Information Management specialist captures information such as contacts, physical address, telephone and e-mail of an outgoing officer. Information specialists create databases for people who move out of the system. Each individual is responsible for a particular field. We don't know who publishes what, which document is lying where." This process of capturing data of outgoing former employees assists to generate a database for the organisation to tap into if they require assistance from employees who have left the organisation. However, these efforts do not serve much purpose as they are not well co-ordinated to allow easier and quicker retrieval when such information is required as the first respondent explained: "each individual is responsible for a particular field. We don't know who publishes what, which document is lying where" (interview, March 13, 2006). The respondent alluded to the fact that there is a lack of co-ordination of efforts in ensuring that what is captured is stored in an environment where easier retrieval could be ensured.

The second respondent (interview, March 13, 2006), who works for Batho Pele Gateway Service Portal, the main government website, said that "The website had been created in order to bring together all government services into one information tool. It is an access point for public and departments. It is currently providing service for home affairs. It renders publication service for them. We write government acts using simple language. The project assists in complementing what other departments are doing."

The comment of the second respondent highlights repositories and access channels from which government employees and the public can access services delivered by government. The respondent's comments further stressed the pivotal role which GCIS plays in rendering communication services to other government departments as well as the provision of access channels for the public to access government information.

### 4.8 Leadership practice

Value and belief systems, character, knowledge and skills are some of the attributes that a leader should have. Most respondents complained that GCIS, like any government institution, is bureaucratic and hierarchical in design. They were appreciative nevertheless, that its leadership leaves enough room for personal initiative to flourish.

Respondent three (interview, March 13, 2006) also argued with corroboration by respondent four (interview, March 13, 2006 ) that the project management approach allowed individuals from junior ranks to take the initiative and gain experience through information and knowledge sharing with all sectors of the institution. This democratic and situational type of practice allows for knowledge sharing and transfer. The fourth respondent (interview; March 13, 2006) said that there was an open-door policy in the leadership of the institution. Personal initiatives from within a directorate were allowed. This provision of space for an individual to engage with an issue without following the hierarchical

communication channels creates a vibrant working environment where people's ideas and initiatives are not stifled. This flexibility allows for creativity and innovation on the part of the individual employees, thereby enhancing the overall performance of the institution.

While a hierarchical nature of leadership was revealed to be prevalent by the majority of the respondents interviewed, they emphasised, however, that a harmonious working culture and personal initiatives and innovation was allowed to flourish and thus encourage a good working relationship within the organisation.

### 4.9 Communities of Practice (CoP)

When GCIS came into being in 1998, its mandate was to transform communication and information systems to suit the needs of the new democratic order. The new dispensation ushered in a new era, which required supply and communication of reliable information for the new nation's positive image locally and internationally. For government to strengthen its economic and social networks towards growth, sustainable development and poverty alleviation, it was necessary to create networks, which would enable universal access to information and knowledge. This was seen as critical for the people of South Africa to take their rightful place in their country and among the global community of nations. The various respondents wished their working culture allowed for more interaction between individuals of various directorates. Formally and informally, individuals within the organisation meet to share ideas about processes and systems within their respective functional areas. By so doing, they encourage the sharing of information within a cluster.

Respondent two (interview, March 13, 2006) argued that architecturally, the open plan office format encourages talk or deliberation between members of a directorate. This, the respondent further clarified, indicates that managing the need, supply and flow of knowledge has become important in the strategic

advancement of an organisation's mission and vision. The approach could assist in creating a people-centred approach which is vital for the functioning of government. Most respondents commended the institution's outreach programme through the Izimbizo programme. For instance, respondent three (interview, March 13, 2006) stated that through Izimbizo, people from different directorates participate in cluster groups using a project management approach to initiate projects, share knowledge and enhance social interaction. This sort of deliberative democratic process encourages creators of knowledge to improve communication, foster courteous behaviour and build strong interpersonal relationships.

### 4.10 Knowledge sharing culture

Effective KM requires a sharing culture. Organisational culture refers to the way things are done in an organisation. This covers values, beliefs, and assumptions held by people within an organisation. The various respondents reflected a culture that encourages sharing within the organisation. The rate at which meetings (informal and formal) are held encourages a high level of interaction and collaboration between individuals. However, these forms of interaction seem to be directorate-based. The first respondent (interview, March 13, 2006) shared this information regarding the organisational culture of sharing: "We hold meetings at different levels. Sectional, directorate and chief directorate meetings are held within the organisation. We have socials every Friday where people from all levels of the institution meet. Drinks are served at personal cost. Sectional team building, a strategic planning are targeted. Budget Lekgotla is a big gathering for 2 (two) days outside the organisation's premises. Each chief directorate provides its own budget and defends its budgetary stand. A platform for exchanging issues is created in this forum".

One element, which generates interest within the organisational culture, is the level of IT use in the execution of responsibilities. Communication seems to be mostly email, Internet- and intranet-based. While this complements sharing of information and re-sourcing of the database of the institution, the third respondent

(interview, March 13, 2006) felt that the human element, particularly the social and emotional being needed to be taken into consideration. The fourth respondent (interview, March 13, 2006) noted that ”Personal interaction is very necessary”. To further emphasise this view, the fourth respondent (interview, March 13, 2006) corroborated this view by stating that “we would not be able to all meet our obligations without it. People go by without interacting with each other (socialise). People interact through the Internet. Sit down and talk. Impact of communicating through the Internet is not as high as when you talk face to face. Face to face talk can assist managers to pick up problems/issues when an employee is down. Interpersonal communication should be appreciated”.

In emphasizing the use of the Internet, the first respondent (interview, March 13, 2006) said that “emails and formal meetings are forms of communication we predominantly use. We have a standardised way of writing e-mails. We proactively plan on activities that affect government. We do less of letter writing”. Respondent one (interview, March 13, 2006) indicated that one other critical aspect of the organisation is that employee average age is about 30 years. In such an environment, an individual’s professional growth becomes predominant in an individual’s thinking. This makes the organisation vulnerable to constant loss of skills from young people whose mobility is very high. Regarding this rapid mobility, two respondents, respondent one (interview, March 13, 2006) and respondent four (interview, March 13, 2006) said that people come for six months and leave for the private sector. The fourth respondent (interview, March 13, 2006) further added that “five to six people leave the organisation every six months.”

One other aspect of this organisational culture is the way in which the organisation is structured. The fourth respondent (interview, March 13, 2006) emphasized that there is a matrix structure. The speed with which employees are required to execute specific responsibilities demands a matrix structure arrangement The work environment informs quick interaction. Thus, the institution adopted a project management culture whereby people, regardless of

level, are selected to lead specific projects. In most instances the fourth respondent argued that this arrangement has assured many times positive feedback regarding the delivery of projects initiated from the organisation.

The trend amongst the youth is career-orientated and always stimulated by new challenges. Thus, the greater presence of the youth in the institution makes the grounding of a particular culture difficult to build and sustain. The result is the prevalence of an adventurous type of arrangement. This, asserts the fourth respondent (interview, March 13, 2006), makes the organisation vulnerable to loss of skills to the private sector. In keeping with the current environment of knowledge economy, there is a need for an arrangement to access knowledge generated when human resources are lost to the private sector.

### 4.11 Conclusion

From the views gathered through questionnaires and from the various respondents interviewed, the preponderance of the informal and/or existence of KM practice emerged. If KM practices were to flourish, organisations of various persuasions would have to create a set of roles and skills that encourage creativity and innovation, sharing, storage and use of knowledge**.** The findings show the level of engagement and interaction in GCIS. The organisation's leadership has attempted to pave a way for transforming the institution in order to meet the objectives and mission as envisaged by the state when the institution was set up to replace SACS. However, the highlight of the organisations generation and sharing of knowledge was a predominantly explicit form of knowledge sharing. The institutional culture in place has positive prospects for a KM framework to be put in place. The next chapter will provide an analysis of the views of the respondents pertaining to the prevalence of KM practice within GCIS.

# CHAPTER FIVE

# ANALYSIS AND INTEPRETATION OF FINDINGS

## 5.1 Introduction

From the preceding chapter, data from various data sources around KM practice was arranged and organised into patterns, which allows analysis to take place. The researcher in this chapter tried to attach meaning to the data collected by identifying, coding and grouping qualitative information according to themes as presented in the previous chapter.

The themes were categorised as follows: Knowledge Management, Organisational Culture, Knowledge Creation, Integration of IT Operation into KM, Innovation as part of Organisational Operation, Knowledge Location, Leadership Practice and Community of Practice (CoP). By means of qualitative approach, Mason (2004:56) argues that in interpreting primary data source, it is significant to have the 'inside view', rather than imposing an 'outside view'. The purpose of the study was to explore the prevalence of KM within GCIS with the purpose of identifying how its prevalence can assist in influencing effectiveness and efficiency in the delivery of government communications and information systems management. Furthermore, an identification of skills gap and mobility of young employees; particularly in the IT environment, was identified as a threat in the delivery of government information and communication by GCIS.

Consensus has emerged from literature about the importance of KM. Malhotra (1997) argues that human capabilities are critical in the creation of knowledge for an organisation. KM is viewed as the exploitation and development of new sets of knowledge assets. In this instance increased input of information creates a fertile ground for generation of knowledge (April**,** *et al*., 2004; Davenport and Prusak, 2001). He further argues that, rather than focusing on the computational metaphor of KM, knowledge creation relies on the active participation of human beings.

The findings from this research reflect the prevalence of KM practice within GCIS. GCIS is a new organisation. Any individual who joins GCIS should buy into the vision and objectives of the organisation. Analysis of these findings will also assist to remedy the challenge of knowledge retention if mobility of staff cannot be reduced.

### 5.2 Prevalence of Knowledge Management practice environment

In the circulation of questionnaires and selection of interview respondents, an attempt was made to elicit information from a group of people who deal with information and knowledge systems of the organisation. Respondents who participated in this study were 25 in total. This amounted to a number of 83% participation of the total number of participant targeted for this research. As explained in chapter 3, the selection of respondents had to be purposeful in order that it could assist in the prediction of the final outcome of the study. Leedy and Ormrod (2010) argue that people or units should be chosen for a particular purpose in a study. In this knowledge economy era, KM practice is very critical. McFarlane (2008) argues that "creating and disseminating knowledge is critically important to a firm's long term productivity." Carlsson (2010) corroborates this view by defining what he called the creation of 'Knowledge spillover' which is critical for economic growth. Setting a stage for knowledge creation is a critical instrument for organizational growth. This was considered important in view of the organisation's strategic location and its significance in the communication of government information and policies to the public.

In order to create a sense of the respondents' understanding of what they were required to respond to, questions around their understanding of knowledge management were asked in both questionnaire and in-depth interview questions. Clarification from the respondents was also sought on their differentiation between knowledge and information. To a varying degree, a lot of differences in meaning between the two concepts were put across by the respondents. The majority of the respondents define knowledge management as gathering,

analysing, storing and use of information for organisational benefits. This view was confirmed by Miller (1999) who argued that "Knowledge management is usually concerned with capturing organisation know-how and know-what through creation, collection, storage, distribution and application." Three respondents further enhanced their argument on KM by adding that the intellectual capacity and/or resources of the organisation is elevated ensuring that the organisation growth and its productivity levels are taken to greater heights. Grayson and O'Dell (1998) endorsed this argument with their view in which they argue that "knowledge management will help organisations become more competitive by using new knowledge to reduce cost, increase speed of operation and meet customer needs."

For KM practice to be institutionalised within the environment, systems and processes in place must be conducive for such institutionalisation to happen. From the views extracted from the questionnaire responses, 100% of those who responded concurred with the idea that there is KM policy in place within the organisation. Cunningham in Rooney, Hearn and Ninan (2005) concurd with the idea that an organisation pulling itself into the knowledge economy age should have policies in place that seek to advance its social and cultural milieu as it orientates its service delivery mechanisms for the better. As an organisation conversant with a lot of creative production on communication matters of government, adapting its level of performance to global standard is critical for organisational survival.

Institutionalising KM within an organisation is a key driver to ensuring that all processes and frameworks put together are pursued. When respondents were asked about their views on the institutionalisation of KM, numerical value of 100% of the respondents agreed on a need to formalise the practice within the organisation. A number of 67% argued that explicit knowledge is available to staff. The majority of the respondents interviewed indicated that technology infrastructure is in place to influence the process to unfold if the authority ensures that the policy that has been put together is implemented.

April and Izadi (2004) confirms the readiness argued by the respondents by stating that an organisational readiness life cycle which illuminates various phases of organisational change which is critical for KM practice institutionalisation needs to be put in place. The theory expressed in this life cycle is such that creativity, innovation and continuous growth are promoted. April and Izadi (2004) further argue that much of this theory is applicable to government departments. In view of the data provided by respondents, the availability of systems, processes and infrastructure created conditions for KM practice to flourish. Through technology input by the organisation, information generated by the organisation can be stored and retrieved with ease. Such practice assists information accessibility from the organisation by its own employees including, but not limited to, direct stakeholders of the organisation (Harvard Business Review, 1998). With the data presented affirming the existence of a conducive environment, it was up to the organisation to lead with the strategy to realise the implementation of KM.

In view of the KM practice which encouraged a sharing culture, one respondent described the organisation as a "warm friendly environment." A numerical value of 83% of the respondents concurred with the idea that knowledge sharing activities happen within the organisation. Two of the respondents who were interviewed highlighted the significance of the use of technology by the institution to facilitate communication between members of staff in the delivery of their respective functions. From the Harvard Business Review (1998) IT not only facilitates the capturing of data, but also influences decision-making and management of the organisation. Jashapara (2004) also argues about the importance of technology in influencing communication between staff and sharing of explicit knowledge. An information-intensive organisation such as GCIS requires necessary Information Technology infrastructure capacity with advanced data processing potential to assist in grounding a knowledge-based practice. The presence and/or availability of such capacity was confirmed by the respondents. While this view can influence the thinking that technology is key to institutionalising KM, the human sharing of knowledge gathered overtime is the

centre and thus needs to be the central focus for institutional memory to be created.

The study also revealed that in their knowledge-sharing endeavours, the employees of the organisation hold formal and informal meetings; 78% of the respondents as reflected in table 6 in the preceding chapter stated that formal meetings are held once a week, while 56,6% stated in table 7 that informal meetings are held once a week. In view of the regularity with which the employees of the organisation get together to interact in either a formal and informal setting, a conducive knowledge-sharing environment was created. Jashapara (2004) stressed the importance of ICT to enable communication both tacitly and explicitly through various channels of communication. Rather than the traditional arrangements of formal and informal meetings organised within an organisation, text-based conferencing, internet, intranets, videoconferencing, groupware tools and e-Learning tools amongst many others are mentioned as critical in facilitating engagement between members of the organisation. Jashapara further argued that many organisations uses expert yellow pages and directories of communities to share knowledge. De Brún (2005) talks about 'collecting' and 'connecting' in KM practice. The emphasis in this instance is linking people with information as well as linking people with people. By doing so De Brún argues that tacit knowledge flow will be enhanced through better human interaction and knowledge filters around the entire organisation instead of being in the mind of one solitary individual. The integrated approach which De Brún emphasized is very important. Knowledge is embodied within the minds of people and thus creating relationships through the collecting and connecting approach can assist in creating a knowledge hub within GCIS.

### 5.3 KM readiness initiatives

Notwithstanding the good effect KM practice had within the private sector, its implementation within the public sector environment remains a terrain where public sector organisations need to tread on a sound footing for the fruits experienced elsewhere to be realised. This study revealed a varying degree of KM

practice though not all processes were in place to see through the formal implementation. While varying degrees of definition of KM were provided by the respondents, a lot of organisational initiatives or programmes reflected an informal KM practice. From the individual interviews conducted with the five respondents, the organisational arrangements in dealing with projects and the way in which meetings were co-ordinated and staged, both formal and informal, attested to the fact that systems and processes responsive to its implementation were in place. Jashapara (2004) argues that knowledge management involves the use of both human and information systems to increase the intellectual capital aimed at increasing institutional performance.

This argument confirms the various individual definitions of KM by the various respondents in both questionnaire and interview responses. The above argument was also confirmed by Bwalya (2009) when he argued that knowledge management is the collection of processes that govern the creation, dissemination, and utilization of knowledge. While noting the fact that one respondent stated that no-one knows what lays where, the idea that a lot of institutional knowledge was generated by employees attests to the practice informally happening.

Another respondent indicated that during Izimbizo outreach programmes, the presidential entourage gathers information from the people around service delivery challenges which then assist in informing future policy positions of government regarding the delivery of social services. Davenport and Grover (2001:8) confirms the generation of new knowledge through those communication clusters and Izimbizo outreach by stating that "knowledge interacts with information which can facilitate the generation of new knowledge." Through outreach programmes the gathering of new information creates the possibility for the organisation to identify new organisational needs which were critical for the organisation on its service delivery endeavours. This process of reaching out to gather information to inform policy direction and defining of new performance targets for government find resonance in Jashapara (2004:70) when he argued that organisational acquisition of knowledge is processed through "congenial learning,

experiential learning, vicarious learning, grafting and searching and noticing." For generations, knowledge has always been transferred from one generation to the next through oral tradition. The human memory preserved such knowledge. The invention of the printing press changed things. This time knowledge was preserved in textual form. The invention of the computer has enabled knowledge custodians to preserve it in the form of published material or computerized databases.

The majority of the respondents who participated in the face-to-face in-depth interviews acknowledged the role which technology plays in creating an environment for them to acquire, analyse and store information in a central repository which is utilised to the benefit of the organisation. One respondent alluded to the fact that he had to respond to more than 200 e-mails a day in his line of duty. Another respondent mentioned that the fact that structures such as the Media Development and Diversity Agency (MDDA), Multipurpose Community Centres (MPCC), the GCIS Information Centre and the International Marketing Council (IMC) exist attests to the both infrastructural and human resource requirements for the organisation.

Recently, technology progress has led to intranet (internal knowledge) and Internet (external knowledge) storage systems. A computer server plays a prominent role in the storage of information in institutions. Hypertext such as World Wide Web is one application that assists in locating knowledge from wherever one is situated. Respondent four (interview, 13 March, 2006) reflected the influence of Intranet, Internet and e-mail which changed the way they communicate and socialise and also execute their communication responsibilities within the organisation. Jashapara (2004) reflects on the significance that technology plays in assisting to locate textual data on information systems. Search engines, he argues, also play a significant role in searching documents through identified index rather than the use of a full document. Thus technology assists as an enabler in the process of information creation, storage, access and retrieval. In spite of the wealth of information that can be accessed in a short space of time,

Devenport and Prusak (1998) argues that all these repositories have their shortcomings. Romhardt (1997) argues that knowledge that is anchored in the mind of the employee is of volatile quality. Once this knowledge is lost, it can only be replaced with high investment and incalculable side-effects. This speaks to the state of affairs found to be prevalent within GCIS where "no one has knowledge of who publishes what." Cong, *et al.,* (2003:29) argues that "knowledge is an important element of competition and is a central source for government functioning". An institution with the brief that requires acquisition, storage and communication of information requires mechanisms that ensure creation and repository of knowledge. Thus technology should be employed in most processes of KM. Cong, *et al.,* (2003) argues that building a technological infrastructure, establishing an organisation-wide intranet with extensive communicating and collaborating capabilities to share the explicit knowledge is important for an organisation. In contrast to this view, Jashapara (2004:113) argues around what he calls the creation of 'electronic fences'. While noting the significance of the use of technology in meeting the knowledge-explicit needs of the organisation, there is a danger that building a sophisticated technology solution which nobody visits can be a hindrance instead of an enablement for the environment to exist. This confirms the view of one respondent who attested that no-one knows who publishes what and where.

Thus, knowledge repositories have a lifecycle that must be managed. Once knowledge has been created, it has a propensity to grow. Its weight will determine the length of time for its survival. It is important to take cognisance of this evolution and then take drastic measures to archive less utilised but potentially useful knowledge.

Repositories of knowledge should be reorganised continuously. The process of reorganising requires elimination of redundancies, combining similar information, generalising content for easier application, and restructuring categories as the need arises. KM practices will require proactive reorganisation and management of repositories in an on-going process rather than waiting for information and

knowledge to become obsolete. While the GCIS has a knowledge repository, it lacks a coherent system, to forge synergy between knowledge assets of its various directorates.

### 5.4 Community of Practice (CoP)

The study revealed that there were communities of practice institutionalised within the organisation. Responses derived from the questionnaire and individual interviews conducted attest to the entrenchment of this culture within the organisation. Most respondents acknowledged the importance of sharing knowledge through their various get-togethers, and in-house arrangements. Again, their congregation during the Budget Lekgotla highlights the prevalence of information and knowledge-sharing practice. This practice is enhanced by Brown, DeHayes, Hoffer, Martin, and Perkins (2009) who state that CoP provide for individuals with similar interests to exchange ideas, tips and other knowledge that might be valuable without any formal management or control. Jashapara (2004:203) argues that "sharing and integration of tacit knowledge is only embedded within the minds of organisational members." He further observes that this type of knowledge is difficult to retrieve. Thus, the fact that the organisation can be brought together through an act of common purpose when they go about their planning business, implies that healthy interpersonal relations between individuals is thus generated

During Izimbizo road shows, different people (in terms of levels, work orientation and competency) come together and share experiences. Individuals from the lower stratum of management could be given responsibility to lead project teams. This type of working arrangement assists in building social capital, which has the ability to create linkages between units and other organisations (departments). It reinforces interpersonal relationships between individuals and cements an element of trust, which, in turn, assists in people opening up and sharing information.

Thus, CoP is a valuable mechanism for creating room for shared information and experience which in the process assists in the transfer of tacit knowledge. [9]

This argument was enhanced by Davenport and Prusak (1998), who noted that KM is concerned with exploration and organisational growth. Both documented (explicit) and tacit (subjective) knowledge are created, processed and shared between organisational members. In the process an organisational repository is created, a hub of knowledge meant to elevate the organisation into greater heights. Wenger, McDermott, and Snyder (2011:2) reinforce what the respondent within GCIS stated with the following principles which they stressed helps to entrench CoP within an organization: design for evolution; open a dialogue between inside and outside perspectives; invite different levels of participation; develop both public and private community spaces; focus on value; combine familiarity and excitement; and create a rhythm for the community.

Wenger, *et al.* (2011) argues that these principles assist to bring out the community's own internal direction, character, and energy. New members who come into the organisation are able to move from the periphery and become integrated into the system and/or culture with ease due to entrenchment of CoP within an organisation. As these principles become entrenched, they help people within the organisation to be natural, spontaneous and self-directed which is key for an organisation in pursuit of excellence. The findings encapsulated above were further emphasised by Wenger (1998) when he argued that a community or a constellation of interconnected communities, dealing with specific aspects of the organisation's competency, has a significant role to play in identifying different forms of engagement with each other. In the process of such interaction, knowledge is created, shared and organised by members of an organisation. Allee (1997) further argued that formal and informal organisations emerge within an organisation. Sharp (1997) sees CoP as a practice where small groups of people work as a united entity over a particular period in an organisation with effective communication. Jashapara (2004:207) warns that "when communities are

[9] Nonaka *et al.*, (2004) refers to "inter-organisational network" in which tacit and explicit knowledge is enhanced by effective communication between individuals and organisations.

composed of professional networks or networks of practice", there is a danger that power relations between network members and managers can come out strongly from such interaction and thus compromise the objectives which the practice was set out to achieve within the organisational make-up of an institution.

Because of the success experienced over time on a number of projects initiated, the voluntary nature in which the teams are shaped generate enough excitement, relevance and their value attracts members of the organisation towards working together and thus inspire the organisation to create a sense of belonging for its employs and thus stimulate organisational performance to greater heights. Quite a number of initiatives within the organisation look to be centred on CoP. Considering the strategic role in which the organisation operates within the structure of government, cementing the practice looks to be a practical solution to assist the organisational endeavour to generate, consolidate and communicate information of government.

### 5.5 Resources, systems, knowledge sharing and transfer

As established in the first chapter, GCIS generates information and ensures that the communication of such information is proper and accurate. Therefore, resources, systems and processes need to be well established to facilitate knowledge-sharing and transfer. Most of the respondents interviewed regarded the capital mentioned above as critical in the generation of information. Respondents four and two (interview, 13 March, 2006) argued about the resourcefulness of the organisation in terms of ICT infrastructure. They argued that the organisation is well resourced to accommodate technology needs of the new era. In the generation, storing and sharing of information, the importance of technology is critical. Skyrme (1997) argues about computing, communication and cognition. By means of technology, efficiency in the execution of the business of most institutions is improved. April, *et al*. (2004:69) emphasised the importance of technology by indicating that it improves "the organisation's responsiveness by faster access to internal expectations and eliminating time and space constraints in communication". This, they emphasized, is important for "information- and

knowledge-sharing." Davenport and Prusak (1998) and Sveiby (1997) emphasised critical factors important for KM practice which include, amongst others, structures, systems, employee training, and infrastructure. Davenport and Prusak (1998) sees knowledge as a key resource which is not easily replicated by rival organisations. Thus, a collective of both human and technology resources is critical for the success of KM practice.

While the technology dimension of KM was explored in terms of technology resources, the human side where tacit knowledge is acquired also requires attention. Respondents were interviewed on the personalities and skills base that the organisation had. The respondents emphasised the significance of the human resources within the organisation and the speed with which individuals come and go. The first respondent (interview, 13 March, 2006) said that in a period of six months, "a lot of people come and go". This has an impact on the development and growth of the organisation. The respondent further argued that the organisation also "trains a lot of people with few of the trained individuals sharing their new acquired skills and knowledge." This is not a good return on the investment made in these people. Mushrush (2002) argues about the change in the employment culture, with employees increasingly demanding a balance between their work life and family life. Nor and Rosline (2005) argue that knowledge workers are difficult to retain. They refer to the kind of work that they do as non-repetitive, non-routine and entailing a high level of cognitive activity. They possess specialized skills and training which have been acquired through a high level of investment by an organisation. Sveiby (1997) confirms the above by indicating that knowledge workers consist largely of people responsible in converting information into knowledge. Nor, *et al*. (2005:4) argues about "establishing cross-functional teams to map knowledge and plan an initiative to ensure that knowledge transfer take place."

The respondent further stressed the fact that the organisation has a lot of young people with the average age being thirty. This group, the respondent argued, posed a challenge to the well-being of the organisational human resources. The

respondent further emphasised that keeping scarce skills within the organisation is very hard. Tables 11 and 12 from the preceding chapter attest to the problem of loss of skills and scarce skill vulnerability by the organisation. A numerical value of 89% of questionnaire respondents affirmed the mobility of skilled workers within the organisation in that they are difficult to retain. The same applied with scarce skills loss, where 67% of the respondents indicated that the movement of the young people and their career aspirations in the private sector compromised the ability of the organisation to retain the best talent and thus assure the organisation of keeping the institutional memory intact. Sveiby's Intangible Asset Monitor (Sveiby, in April and Izadi, 2004:53) argues that the management of an organisation, "Select indicators based on the strategic objectives of the organisation, to measure four major components of intangible assets: growth, renewal, efficiency and stability. The measurement and the resulting trends of these key indices will ensure that the elements of human, structural and customer capital becomes hard assets, in which continuing investment is acknowledged as being essential and from which high returns are expected." Looking at the views of the respondents, the four components of the intangible assets which are 'growth, renewal, efficiency and stability 'are compromised by the rate in which skilled employees moved in and out of the organisation.

Rooney, *et al*. (2005) argue about leveraging of tangible and intangible assets which they referred to as human capital. Like other knowledge commentators, the creation of this capital is critical for the social, economic and cultural development of an organisation because it results in growth and development for a better quality of life. For instance, the creation of "social capitals create trust, norms and networks that facilitate social cohesion to improve the efficiency of a social institution and relationships through collective actions" (Rooney, *et al*., 2005:82). As alluded to above by the respondents, a social fabric which is critical for stimulating growth and development is threatened by the potential movement (in and out) of resources.

When skilled employees move out of the system, much is lost by the organisation. While human resources management is instrumental in ensuring these four areas of performance training, decision-making, performance appraisal, and compensation and reward, Yahya and Goh (2002) equally argue about five areas of KM: "knowledge acquisition, knowledge documentation, knowledge transfer, knowledge creation". Knowledge must be emphasized for KM practice to be entrenched in an organization.

Support for the entrenchment of KM practice by all sectors of the institution is a necessity for it to move forward. The situation within the institution was confirmed by the various respondents interviewed and those that responded to the questionnaire, that a culture of knowledge sharing exists within the organisation. They argued that applications such as emails, internet and intranet are used predominantly by the organisation to generate as well as to share knowledge. In the preceding chapter, Tables 4 and 5 overwhelmingly indicated access and sharing of information within the organisation. A numerical value of 100% of the respondents indicated that access channels for information are in abundance within the organisation.

Furthermore, a numerical value of 83% of respondents agreed that information is shared within the organisation. This then assists an organisation to be in touch with itself and the surrounding environment. Various literature sources including Rooney, *et al*. (2005) argue that information is a public good and also a universal service which needs to be shared to multiply in value. Connors (1997:135) argues that the increased scope which technology has brought to the operations of organisations was "sometimes referred to as the information revolution." The revolution brought about by technology and the availability of infrastructure within GCIS has allowed the organisation to implement management decisions with ease and confidence, a situation which would not have been possible ten years ago.

Rooney, *et al.* (2005:156) emphasized this point by stressing that "information sharing fosters collaboration, enables co-ordination, enhances capabilities and facilitates growth." This view is corroborated by Sethumadhavan (2007) when he said, "Knowledge sharing is a systematic process for creating, acquiring, synthesizing, learning, sharing and using knowledge and experience to achieve an organizational goal." Knowledge creation and sharing is the responsibility of every organisation for it to realize its potential and continuously grow and sustain itself. The activities mentioned cannot happen without creating the necessary climate, culture and environment for it to happen. Leadership is thus critical in influencing the course of events in an organisation.

Respondents argued that the organisation follows a matrix structural arrangement in terms of leadership. This arrangement has allowed the employees in the lowest ladder of the organisational hierarchy to lead projects with aplomb. This attitude cemented the level of trust, collaboration, and understanding and inspired a high level of commitment from individual employees to do well for the organisation. Sun Tzu defines leadership in Meyers (2004:4) as "a matter of intelligence, trustworthiness, humaneness, courage and sternness". This definition is elaborated on by Lambert (1994) who sees it as the realization of potential in others through galvanizing and directing their skills, knowledge and capabilities. Potential and energies in others should be channelled towards the realisation of the organisational vision through the eyes of the leader.

Leadership commitment to the KM process is also essential. Most respondents highlighted the bureaucratic nature of the organisation and respect for line of authority prevalent within the institution. Few respondents, however, highlighted the open-door policy that the leadership of the organisation practices. The organisational culture allows leadership to replicate itself within an organisation. Leadership should assist in understanding the past, present and future. This was observable through project delivery output mechanisms as well as community outreach programmes which the organisation drives through political leadership.

## 5.6 Summary

The chapter traced the path within which aspects of KM practice unfold within the organisation, albeit informally driven. While the practice is considered new and few public institutions have formalised it, those who tried to conceptualise it, vacillate between KM and IM. The young organisation, such as GCIS, have many positive elements that show the institutionalisation of the practice simply requires political will and high level commitments from the senior management structure of the organisation. Analysis of the data showed some pockets or beginnings of Knowledge Management practices.

The behaviour and entrenched business practice within the organisation have indicated a correct road map for the institution to consider en route to formalising the practice. The structure, work and information flow, transparency and latitude to apply the matrix system of organisational leadership provide an appropriate springboard upon which all other elements can be engineered. It is important to understand that building a knowledge capital, incorporating tacit knowledge into the genetic makeup of the organisation, require an inculcation of the thinking by both the leadership and organisational process. Trust was revealed to be an important value of tacit knowledge development and the findings have reflected a cross-cutting interaction between staff at all levels of the organisation. The chapter laid out images of alternative approach for the organisation if formalisation of the practice is considered a viable route to pursue in the foreseeable future.

# CHAPTER SIX
# CONCLUSION AND RECOMMENDATION

## 6.1 Introduction

The intention of this research was to establish whether KM is practiced within GCIS with the intention of identifying how its prevalence can influence the delivery of services in government, using government communication and information management systems. The analysis discussed in chapter five indicates that KM within GCIS is practised though not yet formalised. The findings revealed that the ways in which GCIS conducts its business, the arrangements and engagements of Izimbizo with communities, project management practice in handling the organisation's business, the empowering of middle management in leading projects and decision-making highlight the extent to which retention of organisational knowledge can be leveraged should KM be formalised by the organisation. Based on the findings reflected in the preceding chapter, this chapter will suggest ─ based on the capacity and capabilities of the organisation ─ the possibility of institutionalising the practice from within. The recommendations will seek to focus the organisation on a formal path in institutionalising the practice, taking into account the availability of resources and the organisational culture which is entrenched within the GCIS.

## 6.2 Conclusion

### 6.2.1 Integrated approach to knowledge management

The research set out to explore KM practice within GCIS as a discipline that assists to empower the organisation to deliver on its mandate. Interesting in this exploration is that the prevalence of silo arrangements within different units defeats the cohesion which needs to be established. Knowledge management implies breaking the barriers and instilling a cohesion which supports knowledge

sharing. In spite of the planning process which brings together the people from various layers to engage, there should be a deliberate effort to ensure that all arrangements within the organisation are integrated and everyone is re-orientated towards a common goal.

### 6.2.2 Knowledge management readiness

Central to implementing knowledge management discipline is the organisational readiness to accommodate and adapt the discipline to the internal arrangements of an organisation. What emerged from exploring the internal arrangements of the GCIS was the availability of technological platforms to assist the process to move to the next level. However, appropriate strategies focusing on the human element of the organisation can assist the process, particularly if attention of senior management is drawn to the idea to drive the process at strategic level. Senior management vision will be of assistance in driving the overarching objective to deliver on KM, but not necessarily initiating rules, processes and procedures. Collaboration between senior management and divisional managers can assist in identifying stakeholders within the environment that could help to nurture and place KM programmes on a sound footing.

### 6.2.3 Retention strategies and skills awareness

In this report, one of the key findings has been the movement of skilled young professionals in and out of the organisation. A key focus should therefore be strategy development that seeks to encourage and inspire individuals who come into the environment for a long term period. One of the symptomatic tendencies that unfold in a transforming society is constant change that comes about unannounced and instils a level of instability and fear within the environment. Reorientation of the organisation driven by leadership to influence a core workplace value can go a long way in ensuring that a knowledge culture is built based on the extensive interpersonal relations that have been embedded through the working culture that has been adopted.

In conclusion the study has highlighted the significance that the formalisation of KM practice can have on the institutional make-up of GCIS. In order to realise the gains that the private sector has achieved, the institutionalisation of KM has to be driven from the top echelons of the organisation to provide weight and be extended to the various departments of the institution so that the practice is unit-specific but designed to reorientate the entire organisation into a new order.

## 6.3 Recommendations

### 6.3.1 Metric measuring of organisational performance

An organisation is a garden where the seed of knowledge is planted, grows and bears fruit. This fruit can be fully enjoyed when the systems and processes, human and technological spheres are designed and engineered to leverage the co-existence of all forces towards the organisational vision. Therefore, an organisation requires some sort of metric for measuring its product. It can only do this if it has a sense of 'touch' regarding the expertise available in it. Having an understanding of its identity assists an organisation in the realisation of its vision.

### 6.3.2 Development of knowledge management strategy

This research has highlighted some issues which are essential for the management of the institution to consider. The recommendations listed below will serve as a springboard for debate and for the generation of new knowledge in this area. The underlying recommendations are for the GCIS to consider insofar as the future of formalising KM practice within its environment is concerned.

The GCIS is a hub of government information and a communications repository, and should lead in government KM initiatives. Its location at the Presidency is strategic in that policy monitoring and evaluation of all departments' performances is communicated and shared at a high level through the various clusters. Development of knowledge management strategy with clear outputs to

deliver on knowledge management issues can go a long way in influencing the formalisation of the practice within the organisation.

### 6.3.3 Creation of stakeholder relations with other government departments

The GCIS is a strategic partner of other government departments as regards communication of government information. In exploiting this partnership to the advantage of the institution, mechanisms or guidelines that assist to nurture collaboration and knowledge exchange with structures inside and outside government can be a panacea for knowledge management initiatives within the public sector environment.

## 6.4 Suggestion for further studies

It is worth noting that the study may not be representative enough to arrive at a conclusive position regarding the establishment of initiatives to encourage sound policies and frameworks for KM practices to take off. It is, however, desirable to engage on a broader approach in the near future to ascertain the precise initiatives that could lead to the development of frameworks that encourage the formal arrangement of KM practice. This should emanate from the top of the hierarchy rather than divisional ad hoc arrangements in order to realise the benefit that this could have for a public sector organisation.

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# APPENDICES

## APPENDIX 1- QUESTIONAIRE DISCUSSION OUTLINE

**Participation in this questionnaire outline is voluntary and confidentiality is guaranteed. You are not required to disclose your name in this questionnaire. You should feel free not to provide any information you do not wish to share with me.**

**Designation_____ (optional)**
**Institution _____ (optional)**
**Number of employees: _____(optional)**

**A Knowledge Management**

12.1 What do you understand by the term knowledge management?

12.2 How would you differentiate the two?

(a) Information

……

……

(b) Knowledge

……

……

12.3 Are there any formal procedures/methods, which your institution has to preserve knowledge? Yes/No

12.4 Does GCIS have KM policy? Yes/No

12.5 Does your institution have a place for knowledge management? Yes/No

12.6 In what way do you interact with your IT division?

……

……

12.7 Tacit knowledge is part of everything you do and say and is inherent in our thinking and deeply embedded in the way you work.

12.8 How will you define the prevalence of this type of knowledge in your working environment?

……

……

12.9 Explicit knowledge is the type of knowledge, which is easy to capture and store in databases and documents, and there is a high degree of accuracy when retrieving it.

Do you think your institutional explicit knowledge is accessible? Yes/No

12.10 If so how does it enhance your work performance?

……

……

**B. Organisational Culture**

12.11 How do you access information?

……

……

12.12 How do you share information?

……

……

12.13 How would you describe your organisation to a new comer?

……

……

12.14 How often do you have formal meetings?

……

12.15 How often do you hold informal meetings?

……

12.16 When izimbizo are held throughout the country, what informs the composition of the team that accompanies the president?

……

……

12.17 How does the institution relates to other government department when it comes to knowledge sharing and delivery?

……

……

12.18 Do you have the capacity to create new knowledge? Yes/No

12.19 What drives the organisation in terms of achieving its vision and business objectives?

……

……

12.20 Are you involved with the production of documents that helps to inform your organisation and the community out there about your roles and activities? Yes/No

12.21 Is carrying out skills audit amongst your staff members' part of your work? Yes/No

12.22 Do you have staff members with scarce skills in your organisation? Yes/No

12.23 How do you keep them from looking elsewhere for other opportunities?

……

……

12.24 Have you experienced (loss of skilled personnel) 'brain drain' since you became part of this institution? Yes/No

12.25 What have you done to address the issue of loss of skills?

……

……

12.26 Do you find your team hungry to put the institution forward in terms of its business objectives? Yes/No

12.27 Do you have a learnership programme in your organisation? Yes/No

12.28 If so, what are the programmes that you have put together?

……

……

12.29 What are the intended outcomes?

……

……

12.30 What are you doing to encourage skills development?

……

……

12.31 Is there any area in particular where you have a challenge in keeping and also finding the right skills? Yes/No

12.32 What area is that?

……

……

12.33 How do you sustain teamwork and improved performance within your work environment?

……

……

**C. Information Management**

12.34 How do you gather information from the various sectors of the community?

……

……

12.35 What information management tools inform your business activities?

……

……

12.36 In what way do government communications reach the most rural parts of our country within the context of government service delivery?

……

……

12.37 How many department/sections do you have in this institution?

……

……

12.38 What are these sections?

……

……

**D. Organisational Strategy**

12.39 What organisational strategy informs your communication systems?

……

……

12.40 Since communication and effective information management system is grounded by knowledge, what strategy can you apply to institutionalise KM?

……

……

**E. Demographics**

12.41 Name…….

12.42 How old are you?

…….

12.43When did you join GCIS?

…….

12.44 What position do you hold in this organisation?

…….

12.45 Since you started working here, how has it improved your personal profile?

…….

.……

12.46 If there is anything that would make you stay in this institution, what would that be?

……

……

12.47 If there were anything that would make you go, what would that be?

……

……

Name of Addressee:

_____

_____

Addressees

Institution _____

Postal Code_____

THANK YOU SO MUCH FOR THE EFFORT AND TIME YOU MADE AVAILABLE FOR COMPLETING THIS QUESTIONAIRE

## APPENDIX 2- INTERVIEW QUESTIONS OUTLINE

**The information you supply in this interview (which I am noting in my research note book will not be shared with anyone except me, the principal researcher. You should feel free not to share any information you do not want to share with me or to end the interview at any particular time**

**Name _____Institution _____**

**Designation_____ Date _____**

1. How do you manage to integrate your communication and information strategies with other government department?
2. In the light of your integrative strategy, how do you define knowledge management in a communication and information system's environment?
3. Is there a formal arrangement for km in your institution? Y/N. Can you elaborate?
4. With most of your systems receiving IT business operations, how do you find the significance of the human element in such operations?
5. Do you find yourself working in a bureaucracy with a hierarchical structure?
6. If so, how would you describe a level of innovation in influencing the achievement of your deliverables?
7. Do you think your organisation should achieve a higher profile in the eyes of the public?
8. If you would like to receive the findings of this research, please provide the following information:

Name _____

Addressees _____

Institution _____

Postal Code _____

## APPENDIX 3: LETTER OF REQUEST TO CONDUCT RESEARCH ON GCIS

07 July 2005

TO WHOM IT MAY CONCERN

Dear Sir/Madam

**STUDENT NAME: CHABALALA FUMANI: STUDENT NUMBER: 0006072G**

**DEGREE: MASTER OF PUBLIC AND DEVELOPMENT MANAGEMENT**

The above named student is currently registered for the degree of MM (P& DM) with Wits University and is required to submit a research report as a component for the degree. His proposed research report is: **Knowledge Management within GCIS.** Please could you assist him with the gathering of information for his research report. Possibly with interviews and by participation in meetings.

Should you require any further information, please do not hesitate to contact me.

Thanking you

Yours sincerely

Fisani Mhlongo
STUDENT RESEARCH ADMINISTRATOR

TEL: 011 717 3926
FAX: 011 717 3907
CELL: 083-9679270

# APPENDIX 4: COVERING LETTER ACCOMPANYING THE QUESTIONNAIRE SURVEY.

## KNOWLEDGE MANAGEMENT WITHIN GCIS

**Introduction:**

Good day. My name is **Fumani Chabalala.** I am a working on a research project in my personal capacity (towards partial fulfillment of the requirements of the Master of management (MM) at the School of Public and Development Management (P&DM) – University of the Witwatersrand), that seeks to explore the possibility of the existence and or adoption of Knowledge Management by the institution as part of the process of enhancing information and communication capacities by GCIS.

I would like to humbly request your participation in this study, by responding to a series of questions in the attached questionnaire. All questions require is for you to reflect your opinion on the relevant subject matter. Please note that this is not a test or an examination and thus, there is no right or wrong answer from your side. I only want to know about your honest position on the subject matter. And please also remember, you should feel free not to answer questions that you are uncomfortable with. Your responses will be kept confidential and will help me to develop a better understanding of the subject.

Being an independent fulltime student, I cannot promise any form of compensation for your participation except for my appreciation. If you would like to receive an electronic copy of the final report, please include your email address on the last page of the questionnaire script.

The questionnaire has been designed to take the least possible time.

Thank you

Fumani Solani Stanley Chabalala