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**THE INFORMATION BEHAVIOUR OF MANAGERS IN THE  
MSUNDUZI MUNICIPALITY'S BUSINESS UNITS**

by

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## DECLARATION

I, Karmaney Naidoo, declare that:

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Date: .....

## **DEDICATION**

***Soli Deo Gloria!***

This thesis is dedicated to the glory of God. To God alone be the glory!

## **ABSTRACT**

Information is a crucial resource for improving organisational performance and ensuring the survival of the organisation. Managers occupy a strategic position and play a pivotal role in processing information and directing the activities of employees. The South African Constitution, Act 108 of 1996, mandates local government to adopt a developmental orientation (promoting social and economic development) in order to improve the quality of life of all inhabitants of the municipality. Local government managers therefore play a significant role in fulfilling this mandate of co-ordinating these developmental activities. The purpose of this study was to investigate the information behaviour of managers in the Msunduzi Municipality's business units, in order to adapt or design and deliver an information service that would be effective for the achievement of these managers' job objectives.

Specifically, the study focused on the following research questions: 1) What are the information needs of managers? 2) How do managers meet these needs? 3) What are the managers' information source preferences? 4) What are the barriers experienced by managers during information seeking? The study adopted a quantitative approach, in which a structured self-administered questionnaire was distributed via the municipality's intranet, to 56 level four managers. The key findings of the study indicate that the main purposes for which level four managers in the Msunduzi Municipality require information is for keeping abreast of developments in their fields, broadening their knowledge and for decision-making. In terms of managers' information seeking patterns, managers spend a significant amount of time actively seeking information. They prefer seeking information themselves, as opposed to using intermediaries. The use of libraries for information seeking is minimal and managers accumulate information which gets deposited in their cognitive storehouses for when the need arises. The internet was by far the information source of preference. Reliability is the main factor that influenced source preference and a lack of time was the greatest barrier to information seeking. The study will have practical implications for the Msunduzi Municipal Library services, as well as for management practice. The researcher makes recommendations for adapting the existing library services according to the outcomes of the current study. Recommendations for further research, including qualitative studies which allow for further probing of the findings of this indicative study, are also made.

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“In his heart a man plans his course, but the Lord determines his steps”.

**Proverbs 16: 9 NIV.**

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ASK	Anomalous State of Knowledge
CEO	Chief Executive Officer
E-mail	Electronic mail
Govt	Government
IB	Information Behaviour
ICT	Information and Communication Technology
INISS	Information Needs and Information Services in Local Authority Services Departments
MIS	Management Information System
SDI	Selective Dissemination of Information
SME	Small and Medium Enterprises
SPSS	Statistical Package for the Social Sciences
UKZN	University of KwaZulu-Natal

## **CHAPTER ONE: INTRODUCTION**

There is a growing recognition of the value of information in organisations. Kirk (2002:5) emphasises that this is evident with “the recent emergence of knowledge management as a strategy for enhancing organisational performance”. Information is recognised by managers and organisations as a crucial resource for attaining organisational goals and improving organisational performance (Kirk 1997: 257). De Alwis and Higgins (2001: Literature review), citing Goodman (1993), add that information is extremely important for decision-making, understanding the developments taking place in the external environment and for generating new knowledge. The strategic use of information is critical for successful management and, according to De Alwis and Higgins (2001: Literature review), “a positive correlation has been found between management success and effective information needs assessment, gathering and use”.

Chapter One introduces the study and covers the background to the study, an outline of the research problem, the objective of the study and the subsidiary research questions that will guide the main objective. The significance of the study is then presented, which is followed by the scope and limitations of the study. Definitions of the relevant terms and concepts used in the study are presented, to ensure clarification from the outset. Following this is a brief overview of the model that underpins the study, the literature review and the methodology used in the study. Concluding the chapter is the structure of subsequent chapters of the study.

### **1.1 Background to the study**

In 1994 South Africa entered a new democratic dispensation that changed the structure of government. Van der Waldt (2007a: 17) states that the pre-1994 structure of government was characterised by three levels of government, namely, national, provincial and local. These levels were hierarchical, with no co-operation between them. The new structure comprises three spheres of government, namely national, provincial and local, which are distinct, interdependent and interrelated and each is given some autonomy. The Constitution of the Republic of South Africa,

1996, according to Van der Waldt (2007a: 15), “entrenched the status of municipalities (organisational units of local government) as an integral part of government”. Local government is closest to the people as it directly serves the needs of the community. The transformation of South African society in this democratic dispensation thus relies on local government to play a leading role (Van der Waldt 2007a: 12). Transformation involves eradicating the imbalances created by the apartheid philosophy. Local government, consisting of municipalities, is mandated by the South African Constitution, 1996, and the White Paper on Local Government, 1998, to adopt a developmental orientation (Mgwebi 2011: South African local government: 10 years later). Developmental local government is, according to Van der Walt (2007a: 19), “government who’s main aim is to promote the economic and social development of the community” and, in so doing improve the quality of life of all inhabitants of the municipality. Coetzee (2000), cited in Van der Walt (2007a: 19), elaborates that developmental local government partners with citizens and groups within the community to “find sustainable ways to meet their social, economic and material needs in order to improve the quality of their lives”. Developmental local government requires visionary leadership, participation of all stakeholders, including the community, so that the basic needs of all can be met and the community can grow, be sustainable and prosper (Van der Walt 2007a: 19).

Managers in organisations occupy a strategic position and play a pivotal role in processing information, generating new knowledge for the organisation and, according to De Alwis, Majid and Chaudhry (2006: 362), “they work through others to initiate change and improve organisational performance”. By the same token, level four managers in the Msunduzi Municipality, who occupy a role equivalent to any organisation’s first level managers, play a pivotal role in fulfilling this mandate of co-ordinating the developmental activities of local government.

The present study investigates the information behaviour of level four managers in the Msunduzi Municipality. According to Wilson (2000: 49), “information behaviour is the totality of human behaviour in relation to sources and channels of information, including both active and passive information seeking and use”. For the purposes of this study, information behaviour of managers incorporates their information needs and their information seeking. An information need is a realisation that one’s

knowledge is insufficient to satisfy a goal that one has, creating a gap in one's knowledge; and information seeking is the behaviour engaged in to consciously acquire information in order to fill this gap (Case 2012: 5). The nature of managerial work and the work roles performed by managers are the context of managers' information behaviour (Niebuhr and Gericke 2002: 9-10).

Managers are also a specific user community of the Msunduzi Municipal Library. Kaniki, cited in Stilwell, Leach and Burton (2001: 189), maintains that "the ultimate aim of any library or information service is to meet the information needs of its community". This study focuses on a specific user community of the Msunduzi Municipal Library defined by employment or occupational role, namely managers (specifically level four managers) within the Msunduzi Municipality. Managers are an important user population of the Msunduzi Municipal Library.

The library in question is the Msunduzi Municipal Library, a public library which is one of the five legal deposit libraries in South Africa. According to Jasion (1991: 7), "Legal deposit is a government provision which compels producers of all types of publications to deposit a certain number of copies of each publication in designated libraries or similar institutions". South African law concerning the legal deposit of publications, the Legal deposit Act 54 of 1997, stipulates that the Msunduzi Municipal Library is one of the designated libraries wherein South African produced and published material may be deposited. This prestigious status, that of custodian and preserver of a nation's cultural heritage, has implications for the citizens of Pietermaritzburg and the general public. The implications are that the library has a wealth of information, providing free access to numerous information sources such as books, pamphlets, newspapers, periodicals, maps, government publications, electronic databases and internet sites. For the purposes of this study, the library also has qualified trained information professionals who can assist in retrieving information required by managers.

Almost all organisations have some kind of information system for managers. A management information system (MIS) is a system that collects, processes, stores and transmits relevant, accurate and timely information necessary to facilitate effective managerial decision-making, planning, control and operational functions in

organisations. It can be said that an MIS is designed to support the managers' work through providing relevant information for decision-making (Reddy et al. 2009: 2). The Msunduzi Municipality, a government organisation, does have an MIS. Apart from internal documents, reports and other records, the MIS has a link to the Msunduzi Municipal Library. The library should act as a support base for managers by providing relevant information for their decision-making, planning, control and operational functions. Usage statistics generated by the library and anecdotal evidence, however, indicate that managers' use of the library for their job objectives is minimal.

By understanding the information behaviour of managers in the Msunduzi Municipality, the library service aims to adapt its existing services or design new services to meet this user group's information needs. In so doing, the library service fulfils one of its objectives - that of meeting the information needs of its user community.

## **1.2 Statement of research problem**

Managers, their characteristics and their work environment, have been widely researched. However, relative to the large number of studies available on other professionals such as engineers and scientists, the information seeking behaviour of managers as a distinct group is low (Niebuhr and Gericke 2002: 6; De Alwis, Majid and Chaudhry 2006: 363). Furthermore, studies of information behaviour concerning managers as a distinct group does not feature in Stilwell's (2010) comprehensive article on research into information behaviour in the South African context. Evidently there is a gap in the literature on the information behaviour of managers generally, as well as in the South African context. This study attempts to address this gap.

From the viewpoint of the Msunduzi Municipal Library, observation, anecdotal evidence and the usage statistics (Msunduzi Municipal Library 2009-2012) at the Msunduzi Municipal Library indicate that the use of the library services by local government managers as a distinct user group is poor. This study is an attempt to investigate the information behaviour of managers and in so doing design services to

meet their job objectives and those of the library which is to meet its users' information needs.

### **1.3 Research objective and questions**

The main objective of the study is to investigate the present information behaviour of managers of the Msunduzi Municipality's business units, in order to adapt or design and deliver an information service that would be effective for the achievement of the manager's job objectives. The major research question therefore is: what is the information behaviour of managers in the Msunduzi Municipality's business units?

To achieve the main objective the following research questions need to be addressed:

- What are the information needs of managers?
- How do managers meet these needs?
- What are the information source preferences of managers?
- What are the barriers experienced by managers during information seeking?

### **1.4 Significance of the study**

Conducting a study of manager's information behaviour will lead to a better understanding of their information needs and information seeking behaviour, including their information source preferences. This will assist the library services and information practitioners to adapt its existing services or design new services that will be effective for the achievement of the managers' job objectives, the most important being service delivery of excellence to the inhabitants of the Msunduzi Municipality. Service delivery will improve the quality of life for all in the community.

Also significant will be the study's contribution to management practice, as it will provide insights into the information needs and information seeking behaviour of managers.

### **1.5 Scope and limitations of the study**

This section discusses the scope and limitations of the study.

### **1.5.1 Scope**

In terms of the scope of the study, the following parameters apply:

- Geographic area: the study is confined to the Msunduzi Municipality situated in Pietermaritzburg, KwaZulu-Natal, South Africa.
- Unit of analysis: level four managers of the five Strategic Business Units of the Msunduzi Municipality. The business units are:
  - Community services
  - Corporate Services
  - Infrastructure Services
  - Economic Development
  - Financial Services
- The aspect under investigation is the information behaviour of managers. As mentioned in the background, Wilson (2000: 49) defines information behaviour as “the totality of human behaviour in relation to sources and channels of information, including both active and passive information seeking and use”. For the purposes of this study information behaviour of managers incorporates their information needs and information seeking, including their information source preferences. Omitted from the study are other aspects of information behaviour, for example information use by managers, as this would require an in-depth qualitative approach that would require more time than that allocated for a coursework Masters’ degree.

### **1.5.2 Limitations**

A review of the literature (Streatfield 1984: 421; Levin 1991: Information seeking activities) indicates that managers are extremely busy people and access to them might prove challenging, especially given the fact that the time allocated for the completion of the study was limited. Therefore access to the respondents had the potential to affect the results of the study. To address and moderate this challenge, an e-mail message (declaring the researchers’ intention to gather data) was sent out to the managers well in advance of the data collection, and regular reminders about completing the questionnaire were sent thereafter.

## **1.6 Definition of terms and concepts used in the study**

This section provides brief definitions of key terms and concepts used in the study. These terms and concepts are elaborated on in Chapter Two. The terms are not arranged alphabetically, but systematically, to guide the reader's understanding.

### **1.6.1 Information**

Information is understood and interpreted differently, depending on the discipline an individual is coming from. Losee (1997: Definitions of information) states that:

One of the most common ways to define information is to describe it as one or more statements or facts that are received by a human and that have some form of worth to the recipient.

Krikelas (1983: 6) regards information as being “any stimulus that reduces uncertainty”. However, Case (2012: 74) prefers to treat information as “a primitive concept that is so basic to human understanding that it does not require a tight definition”. Case (2012: 5) therefore states that “information can be any difference you perceive in your environment or within yourself. It is any aspect that you notice in the pattern of reality”.

Bates (2010: Information) states that:

Information is also generally assumed to cover all instances where people interact with their environment in any such way that leaves some impression on them – that is, adds or changes their knowledge store.

Kaniki (2001: 191) defines information as “ideas, facts, imaginative works of the mind and data of value, potentially useful in decision making, question answering, problem solving etc.” Kaniki (2001: 191) adds:

Data, information and knowledge are often used interchangeably but they are in fact not the same. Information is an awareness of facts or organized data which can lead a person to a state of knowing, while knowledge is the transformed information assimilated by a person and used in appropriate situations.

For the purposes of this study, the definition by Kaniki (2001: 191) will be adopted.

Since the context of this study includes the management discipline, management information is defined by Jones (1995: 163) as “raw data that have been processed into a form which provides relevant and meaningful information that aids management in business decision making”.

### **1.6.2 Information need**

An information need, according to Case (2012: 5, 80), is “a recognition that your knowledge is inadequate to satisfy a goal that you have; and is the cause of information seeking”. Information needs cannot be observed and Case (2012: 91) states that “they are inferred *post hoc*, after some action or request has been made manifest”.

### **1.6.3 Information seeking**

Information seeking is behaviour that occurs when:

An individual perceives a problematic situation or gap in his or her information in which his or her internal knowledge and beliefs, and model of the environment fail to suggest a path toward satisfaction of his or her goals (Case 2012: 386).

Case (2012: 5) points out that information seeking is “a conscious effort to acquire information in response to a need or gap in your knowledge”.

Wilson (1999: 251) explains that “in the course of information seeking, the individual makes demands upon formal and informal information sources or services, resulting in either success or failure”.

### **1.6.4 Information behaviour**

Information behaviour (IB), defined by Bates (2010: Introduction), refers to “the many ways in which human beings interact with information, in particular, the ways in which people seek and utilize information” . Elaborating on this definition, Case (2012: 5) states that:

Information behaviour encompasses information seeking as well as the totality of other unintentional or passive behaviours (such as glimpsing, or

encountering information) as well as purposive behaviours that do not involve seeking, such as actively avoiding information.

Wilson (2000: 49) defines IB as “the totality of human behaviour in relation to sources and channels, of information, including both active and passive information seeking, and information use”.

### **1.6.5 Information sources**

An information source, according to Behrens, Olen and Machet (1999: 312), refers to “any person, object, publication that provides information”. There are various types of information sources, such as those listed by Behrens (2000: 5), including “books, magazines, newspapers, museum objects, films, computer databases and internet sites”.

### **1.6.6 Managers**

Managers, as defined by Robbins and DeCenzo (2005: 5), are “individuals in an organisation who direct the activities of others”.

### **1.6.7 Level four managers**

Level four managers in the Msunduzi Municipality are equivalent to frontline or first level managers who are the link between senior managers and the operative employees.

## **1.7 Theoretical framework and preliminary literature review**

This section identifies the model that underpins the study and gives a brief overview of what the literature review will entail.

### **1.7.1 Theoretical framework**

Of the models available on information behaviour, for example Krikelas (1983), Ellis (1984a, 1984b), Kuhlthau (1991, 1996), Dervin (1993), Leckie et al. (1996), the Wilson (1996) model was selected as a suitable model for this study, as Chowdhury (2010: 252) states that “it is widely considered to be one of the most comprehensive

models of human information behaviour explaining information seeking behaviour of all categories of users". Wilson (2007: Connections) explains that:

It is a very general model that is not only hospitable to theory that might help explain the more fundamental aspects of human behaviour but also to the various approaches to information seeking behaviour and information searching.

The Wilson (1996) model suits the objective of this study, which is to investigate the information behaviour, specifically the information needs and information seeking behaviour of managers. It clearly represents the relationship among the various stages in information seeking.

### **1.7.2 Preliminary literature review**

To gain insight into the information behaviour of local government managers, the relevant literature on managers' information needs and their seeking behaviour, including their preference for information sources, have been reviewed. Managers' habits or characteristics, as well as their work roles, determine their information needs, which trigger information seeking behaviour leading to utilisation of information. The literature review was based on the research questions which are also linked to the theoretical framework.

## **1.8 Research methodology**

The study was based on the post-positivist research paradigm and adopted a quantitative approach. A descriptive survey was used. The population of the study was made up of 56 level four managers in the Msunduzi Municipality. These managers were equivalent to line managers who were responsible for directing the day-to-day activities of operative employees. The sample was a census sample, as the population was small. The research instrument consisted of a structured self-administered questionnaire consisting of closed and some open-ended questions. The questionnaire was distributed to the respondents by e-mail via the Msunduzi Municipality's intranet. Descriptive statistics (SPSS) such as frequency distribution of variables were used to describe and analyse the data. To increase the reliability and validity of the instrument, a pilot study was conducted within the Ethekeweni

Municipality in Durban, KwaZulu-Natal. Academic experts were engaged to examine the questionnaire and advise the researcher of any ambiguities and mistakes. The University of KwaZulu-Natal (UKZN) research ethics policy was followed while conducting the study.

## **1.9 Structure of the study**

The purpose of the structure of the study is to give some indication of the various chapters and their content. Chapter One provides a general introduction to the study. Chapter Two, theoretical framework and literature review, deals with the principal theory upon which the study was constructed and a review of the literature concerning the information behaviour of managers. Chapter Three describes the research methodology adopted for the study. Chapter Four discusses the results of the empirical study. Chapter Five interprets the results of the study. Chapter Six, summary of the research findings, conclusions and recommendations, summarises the research findings and provides recommendations concerning the study, as well as future research.

## **1.10 Summary**

This chapter provided the background to the study, the research problem, the main objective of the study and the research questions that guided the objective. Also presented was the significance of the study and the scope and limitations of the study. The definitions of the terms used in the study were then presented, to provide specific meanings of the terms used in the study. This was followed by a brief overview of the theoretical framework and preliminary literature review. The research methodology adopted by the study was briefly introduced and finally presented was the structure and content of subsequent chapters of the study. Chapter Two presents the theoretical framework that underpins the study, as well as a review of the related literature which gives some context to the study.

## **CHAPTER TWO: THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

The purpose of the study was to investigate the information behaviour of managers in the Msunduzi Municipality's business units, in order to adapt or design and deliver an information service that would be effective for the achievement of the managers' job objectives. This chapter presents the theoretical framework that underpins the study and then reviews relevant literature pertaining to managers' information behaviour. The theoretical framework allows for "gaining information to form new opinions, judgements or applications of knowledge" (Mostert and Ocholla 2005: 140). The literature review is a crucial step in the research process, as it informs the researcher about previous related research findings, as well as the most suitable research methods and techniques used. This study's literature review draws from the disciplines of information science and management and public administration, in an attempt to understand the information behaviour of managers.

### **2.1 Theoretical framework**

Järvelin and Wilson (2003: 2) maintain that "all research has an underlying model of the phenomena it investigates, be it tacitly assumed or explicit". Models are similar to theories, in that they describe relationships among concepts (Capella 1977, cited in Case 2012: 292). Case (2012: 134) states that, "theory is a set of related statements that explain, describe or predict phenomena in a given context". Case (2012: 134) explains that models are diagrams that make it easier to understand the content, as compared to formal theories.

Wilson (1999: A model of information behaviour) states that information behaviour models are statements represented diagrammatically in an "attempt to describe information seeking activities, the causes or the consequences of these activities or the relationships among stages in the information seeking behaviour". Johnson (1997: 104), cited by Case (2012: 133), posits that theoretical models of information seeking should:

Provide a sound theoretical basis for predicting changes in information seeking behaviours, provide guidance for designing effective strategies

for enhancing information seeking and should explicitly conceptualise information seeking behavior, developing rich descriptions of it.

Some models of information seeking include:

- Krikelas (1983)
- Leckie, Pettigrew and Sylvain (1996)
- Ellis (1989, 1993)
- Kuhlthau (1991, 2004)
- Byström and Järvelin (1995)
- Wilson (1981, 1996, 1999)

### 2.1.1 The Wilson (1996) model

The model that was chosen to underpin this study was the Wilson (1996) model, as shown in Figure 1.

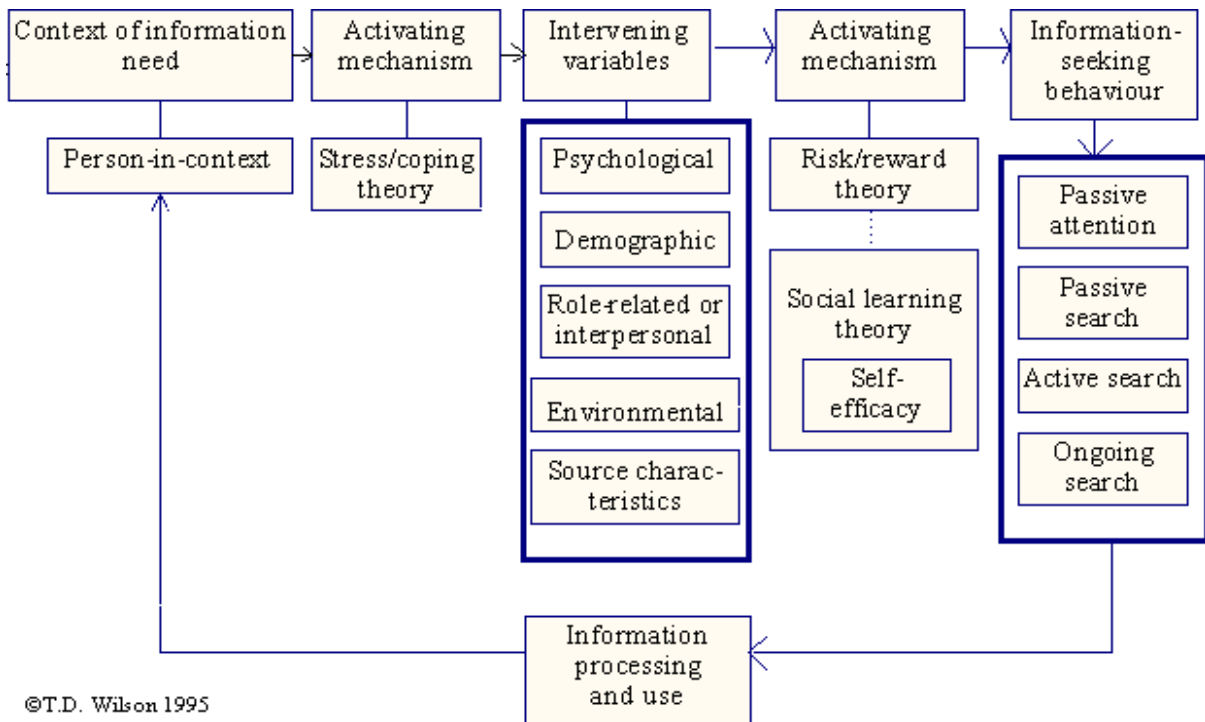


Figure 1: Wilson's model of 1996  
Source: Wilson (1999)

The model depicts the cycle of information activities, from the recognition of an information need, progressing through information seeking, which includes interacting with information sources, to the stage when information is processed and used.

The recognition of a need, according to Niedźwiedzka (2003: The context), is “influenced by the context which can be the person him or herself or the role the person plays in work and life, or the environments (social, political or economic)”

Another component of the model includes activating mechanisms, which are mechanisms that activate or motivate information behaviour (Niedźwiedzka 2003: Wilson’s general model of information behaviour). One type of motivator can be explained using stress/coping theory drawn from the psychology discipline. Case (2012: 155) feels that this theory explains why “some needs prompt information seeking more so than others”. The need to cope with a situation or solve a problem is also a motivator. Therefore it can be said that stress/coping theory determines the decision not to seek or to seek information in order to satisfy a need (Wilson 2007: The place of theory).

Risk/reward theory, another activating mechanism, is drawn from the consumer research field. Niedźwiedzka (2003: The mechanisms that activate information behaviour) point out that “wanting a reward can induce the feeling of necessity, even if the reward means only the comfort coming from eliminating the feeling of uncertainty”. Case (2012: 155) states that the risk/reward theory explains why some information sources are used more than others.

The theory of self-efficacy, yet another motivator drawn from social learning theory is a motivator for searching information sources (Wilson 2007: The place of theory). Social learning theory explains “why people may or may not pursue a goal successfully, based on their perceptions of their own efficacy”, that is, their perceptions of whether they can execute the behaviour that will produce the desired outcome, or not.

The information seeking behaviour component of the model explains how information is acquired. Information is acquired through any or all of four modes:

- Passive attention: according to Wilson and Walsh (1996: Searching and acquisition) passive attention involves the unintentional acquisition of information such as when watching television.
- Passive search: this mode involves the unintentional acquiring of relevant information while engaging in a particular behaviour or search (Niedźwiedzka 2003: Phase of acquiring of information).
- Active search: involves actively seeking out information.
- Ongoing search: involves continuing to search for information in order to update or expand one's knowledge base (Niedźwiedzka 2003: Phase of acquiring of information).

The information processing and use component explains how the acquired information is processed and used and may consequently create new information needs, resulting in the creation of a new cycle of information behaviour.

Wilson (1999: The basic framework...) maintains that the basic framework of his 1981 model still applies. The person in context is still the focus of information needs, what the 1981 model called barriers Wilson (1999: The basic framework...) prefers to use intervening variables, and information seeking behaviour still feature in the 1996 model. Case (2012: 140) cites Wilson's (1981: 251-252) acknowledgement of the limitations of the 1981 model:

It does little more than provide a map of the area and draw attention to gaps in research; it provides no suggestion of causative factors in information behaviour and, consequently, it does not directly suggest hypotheses to be tested.

The new features of the 1996 model include theories drawn from fields other than information science such as decision-making, psychology, innovation, health communication and consumer research (Wilson 1999: The basic framework...). These theories aid in explaining the various aspects or stages of the model. Wilson's (1996) model was "not derived from any theory proposed by other writers", but from

analysing what was known about human information behaviour and analysing the information behaviour of social workers and their managers investigated in the research project on information needs and information services in local authority services departments (INISS) (Wilson 2007: The place of theory).

Another characteristic of the Wilson (1996) model, as stated by Wilson (2007: Connections), is that it is:

A very general model and is not only hospitable to theory that might help to explain the more fundamental aspects of human behaviour, but also to various approaches to information seeking behaviour and information searching.

According to Wilson (2007: Connections), his 1996 model incorporates or is connected to various models. These include, Ellis's information seeking behaviour model (1989, 1993) in the 'active search' mode of information seeking, Erdelez (1997) model of information encountering which is seen as an elaboration of Wilson's 'passive attention' mode, Kuhlthau's model of information search process (1991), and Dervin's sense-making theory (1996). These models and how they connect to the Wilson (1996) model are presented in turn.

#### **2.1.1.1 Ellis model (1989, 1993)**

Ellis (2005: 138) states that the Ellis models (1989 and 1993) highlight the fact that "a behavioural approach to user modelling is more feasible than the cognitive approaches in information retrieval research". The theory proposes that seeking behaviour is characterized by the following activities (Ellis 2005: 138):

- Starting: activities associated with the initial search for information.
- Chaining: "following chains of citations or other forms of referential connection between materials".
- Browsing: searching in an area of potential interest.
- Differentiating: "using differences between sources as a filter on the nature and quality of material examined".
- Monitoring: being vigilant of developments in a field through the monitoring of particular sources.
- Extracting: working on a particular source to find material of interest.

Two actions were added to the six initially proposed by Ellis. According to Case (2012: 144), these are:

- Verifying: checking that information is correct.
- Ending: a final search for literature at the end of a project.

These eight activities do not take place in a fixed sequence – the order of the activities may vary depending on the various information seeking patterns (Case 2012: 143). Ellis (2005: 139) cautions that the activities do “not represent a set of stages or phases that any or all researchers follow when seeking information”.

### **2.1.1.2 Erdelez information encountering model (1997)**

Another conceptual framework that the Wilson (1996) model finds hospitable is that of Erdelez’s information encountering. Information encountering is seen as an elaboration of the ‘passive attention’ mode of the Wilson model (Wilson 2007: Connections). Information encountering is defined by Erdelez (2005: 180) as “an instance of accidental discovery of information during an active search for some other information”. This could be viewed as serendipitous discovery of information. The 1997 Erdelez functional model of information encountering identifies several steps namely, noticing, stopping, examining, capturing and returning (Erdelez 2005: 181). The steps involve a combination of cognitive, affective and behavioural processes. While searching for some piece of information, the user sees something potentially relevant to a “background/interest/task” problem. The original search is then interrupted to examine the encountered information. This information is saved if it is found to be useful. The user then goes back to the original search for information (Erdelez 2005: 181-182).

### **2.1.1.3 Kuhlthau’s model of information search process (1991)**

A further connection to the Wilson (1996) model from the information science discipline is Kuhlthau’s (1991) model of information search process, specifically the ‘active search’ for information, even though the search process is restricted to a single search episode (Wilson 2007: Connections).

Kuhlthau adopts a phenomenological perspective (associated with feelings, thoughts and actions) to information searching. This model complements and is broader than

that of Ellis, as it attaches feelings to the various stages of activities (Wilson 1999: Kuhlthau's work...). Chowdhury (2010: 254) points out that "information seeking is a process of construction in which users' progress from uncertainty to understanding". Wilson (1999: Kuhlthau's work...) and Case (2012: 145) maintain that the stages in Kuhlthau's model are:

- Initiation, which is characterized by feelings of uncertainty, vague thoughts and associated with active background seeking. This then is the recognition of the information need. Initiation is followed by:
- Selection of a topic of the search and the approach involved.
- Exploration. The third stage is where doubt and confusion may increase as sources are explored. Sometimes the search may be dropped.
- The fourth stage is formulation where focus is encouraged and uncertainty decreases resulting in feelings of increased confidence.
- Collection. The fifth stage is where relevant information is gathered and confidence grows, as uncertainty decreases.
- Presentation is where the collected information is used to answer the initial query or complete a task.
- Assessment of what the user has accomplished is the seventh and final stage and this leads to increased self-awareness and esteem. Case (2012: 146) maintains that this model does not take cognisance of any contextual factors leading to the realisation of an information need, and "it does not follow the actions out to their specifics". The model's distinct features include a focus on uncertainty as the key driver of information searching, as well as a focus on actions, cognitions and emotions that take place during the search process.

#### **2.1.1.4 Dervin's sense-making theory (1996)**

Dervin's sense-making theory (1996) has a connection with Wilson's (1996) model, since it posits that the perception of an information need (causing a gap in an individual's knowledge) causes the individual to take action to bridge that gap (Wilson 2007: Connections). Dervin's model is more a methodological approach designed for making sense of reality, rather than a model of information seeking (Wilson 1999: Dervin's sense-making theory...). According to this approach sense-making is put into action in terms of four constituent elements (Chowdhury 2010:

253-254). The first element or phase, called “a situation in time and space”, identifies the context in which the problem arises. The second is called the “gap” phase, in which a person identifies the difference between what he or she knows, and what they need to know in order to make sense of the situation. The third element is an “outcome” which is the result of the sense-making process. The fourth element is “a bridge”, which is the means of closing the gap between the situation and the outcome.

Wilson’s (1996) model does not claim to provide explanations concerning everything about human information behaviour, but is hospitable to explanations set out by other theorists (Wilson 2007: Connections). Wilson has expended much effort on the development of his models and has produced models that have been cited in numerous journals of quality and have been cited by numerous well-known authors who have contributed to information science fields. Some of the authors are Belkin, Bergman, Choo, Dervin, Cole, Ellis, Kuhlthau, Fidel, Inqwersen, Vakkari, Pettigrew, Savolainen and Wersig (Wilson 2007: Use). Wilson’s (1996) model depicts the full sequence of activities from the need to the obtaining information, while many other models focus on a section of information activities. The explications concerning the Wilson (1996) model presented above, as well as the fact that, according to Chowdhury (2010: 252), this model is “widely considered to be one of the most comprehensive models of human information behaviour explaining information seeking behaviour of all categories of users”, is the reason for choosing this model as the underpinning theoretical framework for the study.

Niedźwiedzka (2003) used Wilson’s (1996) model in her study of health care managers in Poland although she pointed out what she deemed imperfections in the model concerning managers’ information seeking behaviour. Wilson (2007) was able to provide a plausible rebuttal to these claims. A more detailed account of the criticisms of the model by Niedźwiedzka (2003) will be presented later in this chapter. Meanwhile, in the South African context, Mostert and Ocholla (2005: 151) indicated that, in a study of information seeking patterns of parliamentarians in South Africa, Wilson’s (1996) model was chosen as the conceptual framework for the study.

### **2.1.2 Criticism of the Wilson (1996) model for the study of managers**

Niedźwiedzka (2003) has criticised the Wilson (1996) model regarding its application to the study of managers as a user group. Niedźwiedzka (2003: Critical remarks) claims, after conducting research into the information behaviour of policymakers and health care managers in Poland, that Wilson's (1996) model has some imperfections in terms of its content and graphic presentation. Specifically, managers do not personally seek information due to their work load and lack of time. They use intermediaries to search, process and evaluate the information. It is Niedźwiedzka's contention that the Wilson (1996) model applies only to those who personally seek information. Managers do use intermediaries to search for information. Niedźwiedzka (2003: A new information behaviour model...) proposes a new model that is based on Wilson's theoretical propositions, but which can be applied to a broader range of users. It shows two strategies of information seeking, namely, a user seeks information personally, or a user engages the help of an intermediary or intermediaries. Other changes involve identifying the context with the intervening variables. The context variables influence behaviour at all stages of the process (i.e. submerging the entire information acquisition process in the context, which is made up of the intervening variables). The activating mechanisms can occur at all stages of the information acquisition process.

Wilson (2007: Conclusion), in his article: "Evolution in information behaviour modelling", responds to Niedźwiedzka's (2003) criticisms by maintaining that when using the Wilson models, "no one model stands alone", but all models must be looked at and reflected upon. Therefore the role of the intermediary is reflected in the Wilson (1981) model. The 1981 Wilson model is itself an elaboration of 'person-in-context' in the Wilson (1996) model.

The theoretical framework of this study was based on the Wilson (1996) model. Clearly, this framework linked in with the main objective of the study, which was to investigate the information behaviour of managers, specifically what are the information needs of managers, how do they meet these needs, what information sources do they prefer and what barriers are experienced during information seeking? Managers' information needs trigger information seeking depending on the extent of the stress associated with the need and/or the perceived risk or reward of

not engaging in information seeking. Factors that could support or act as barriers to information seeking may include managers' demographic background, environmental variables and the characteristics of the information sources. Managers may acquire information through an active search for information, a search for information on an ongoing basis to update or broaden knowledge in their field, passively, through either listening to the radio or watching television, or where relevant information is unintentionally found. The information is then processed and used.

## **2.2 Literature review**

According to Fox and Bayat (2007: 36), the literature review provides a "sound theoretical overview of the existing research findings, theories and models in terms of the specific research problem". The purpose of the literature review therefore is to inform the researcher of the past and latest up-to-date developments in the field of the study. This avoids duplicating research. The literature review also evaluates methods typically used for studies similar to the research study in question. The literature reviewed in this study is based on the research questions, which are also linked to the theoretical framework.

This sub-section of the chapter will firstly provide details of the context of the study. Then, in order to gain insight into the information behaviour of managers in the municipality, relevant literature on the following aspects will be discussed in turn:

- The nature of managers' work, such as their work roles, managerial activities and their general behaviour. The reason for discussing this is twofold, firstly it is to give some context to the managers' work environment and, secondly, the nature of managers' work determines their information needs, which triggers their information seeking behaviour (including their information source preferences), leading to the utilisation of information.
- Information needs, in general, followed by managers' information needs.
- Information seeking, in general, followed by managers' information seeking. Since information seeking includes information source preferences, managers' information source preferences, including the factors that affect them, will be discussed.

### **2.2.1 The context of the study**

De Alwis and Higgins (2001: How managers acquire and use information) state that, in order to understand the information behaviour of managers, it is important to understand “the contexts in which managers seek and use information”, since as Krikelas (1983: 10) and Mackenzie (2003: 65) put it: the context influences managers’ information needs and information seeking behaviour.

The context of the present study was the five business units within the Msunduzi Municipality, situated in the province of KwaZulu-Natal, South Africa. Van der Waldt (2007a: 4-5) defines a municipality as “an organisational unit of local government”. Van der Waldt (2007a: 4) explains that local government is a sphere of government that “directly serves the needs of the community”. The objectives of local government, according to the Constitution of the Republic of South Africa, 1996, are to:

- Provide democratic and accountable government for local communities.
- Provide services that are sustainable.
- Provide social and economic development.
- Promote a safe and healthy environment.
- Encourage the involvement of communities and community organisations in the affairs of local government.

A business unit is an administrative unit within the municipality. The business units are organised according to specific functions. The five business units within the Msunduzi Municipality are:

- Financial services: the key performance areas of this unit include budget planning and financial governance, revenue and management of debt, as well as supply chain management (Van der Waldt 2007b: 79).
- Community services: this unit deals with social services and includes the provision of libraries, parks and recreation, sports facilities, fire services, cemetery management and traffic services.
- Economic development services: this unit deals with town planning, economic development and growth, entrepreneurial development, environmental

management and black economic empowerment (Msunduzi Municipality 2013: Msunduzi Municipal website).

- Infrastructure services: this unit provides all essential services to local citizens. Electricity, water, sanitation and roads maintenance fall under this business unit.
- Corporate services: corporate services, according to Van der Waldt (2007b: 79), should be “a support department to all other municipal departments. Human resources and employee relations, as well as information and communication technology, fall under this business unit (Msunduzi Municipality 2013: Msunduzi Municipal website).

The study population comprised level four managers within these five business units. According to Ngcobo (2013), level four managers are “responsible for the implementation of plans, policies and operational strategy of the organisation; as well as to ensure the span of control is effective and efficient in meeting set targets”.

## **2.2.2 The nature of managerial work**

This sub-section discusses managerial work roles, based on Henry Mintzberg’s (1973) 10 work roles, managerial activities and functions and general managerial behaviours, such as managers’ habits and characteristics.

### **2.2.2.1 Managerial roles**

The nature of managerial work requires that managers perform certain roles in addition to the four management functions or activities (planning, organising, leading and controlling). Henry Mintzberg, a management theorist, postulated that managers play 10 different roles, which can be divided into three groups (Mintzberg 1973, cited by Katzer and Fletcher 1992: 237).

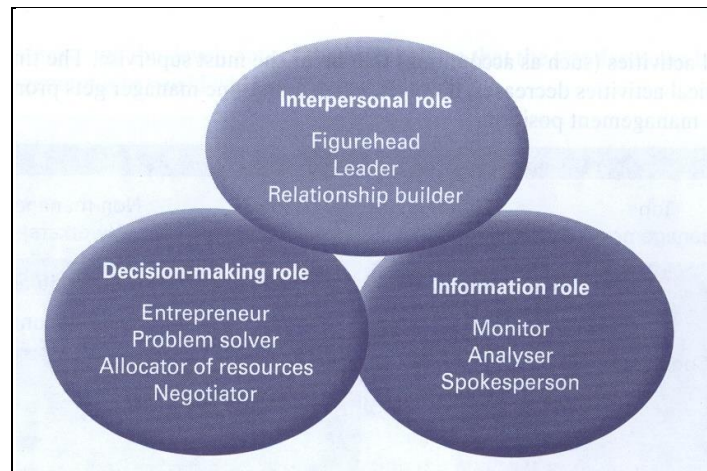


Figure 2: Mintzberg's ten managerial roles in three overlapping groups

Source: Smit et al. (2011: 14)

Figure 2 depicts the 10 roles, divided into three groups. Mintzberg (1973), cited by Katzer and Fletcher (1992: 237), believes that all managers' jobs are similar and can be described in terms of these 10 roles. Managers' jobs in 'profit' organisations and non-profit organisations (e.g. local government) are alike. Robbins and DeCenzo (2005: 10-11) add that managers perform the same activities, regardless of their managerial level in the organisation. The differences are in the degree and emphasis of the role, rather than the activity. The 10 roles are divided into three groups, namely:

- **Interpersonal role:** In this role the manager plays figurehead and signs documents, for instance. He or she may also play leader, by being responsible for motivating and training staff. The manager may also play liaison or relationship builder, which involves maintaining a network of outside contacts.
- **Informational role:** This role includes playing monitor. As a monitor the manager looks for, as well as receives, information concerning the organisation and the environment. He or she may also play the role of analyst or disseminator of information. As disseminator, information received from employees is transferred to others in the organisation. This would be done by holding meetings or making phone calls. The role of spokesperson also falls under the informational role. Here the manager acts as a

representative for the organisation and performs activities such as providing the media with information.

- **Decision-making role:** This role requires the manager to play entrepreneur, by looking for opportunities to bring about improvement and change. The manager also plays problem-solver or disturbance-handler under this role. Here the manager tries to solve and correct issues concerning the organisation. The manager may also play resource allocator (making decisions concerning what resources need to go to whom) and negotiator (representing the organisation with trade unions, for instance) under the decision-making role.

Katzer and Fletcher (1992: 237) maintain that all these roles depend on information for the successful performance of the roles.

#### **2.2.2.2 Managerial activities**

Managerial activities refer to the fundamental or traditional functions of management, namely planning, organising, leading and controlling (Smit et al. 2011: 10). These will be briefly discussed, in turn.

- **Planning:** According to Robbins and DeCenzo (2005: 8-9) the activities involved in organisational planning encompasses setting organisational goals, establishing strategies for achieving these goals and “developing plans to integrate and co-ordinate activities”.
- **Organising:** Organising involves determining what tasks must be done, who is responsible for doing them, and how the tasks are to be executed (Robbins and DeCenzo 2005: 9).
- **Leading:** Managers lead by influencing and motivating employees, directing their activities and selecting the most effective communication channel, so that the objectives and goals of the organisation are achieved (Robbins and DeCenzo 2005: 9; Smit et al. 2011: 14).
- **Controlling:** This involves monitoring organisational performance, comparing it with previously set goals and making corrections, where necessary (Robbins and DeCenzo 2005: 9).

These managerial functions or activities can be applied in 'profit' organisations and non-profit organisations such as a municipality. Since this study focuses on level four managers in the municipality (equivalent to first level managers), it is expected that they would spend a significantly larger proportion of their time leading employees, i.e. directing the activities of the employees, rather than on planning, organising or controlling.

In Figure 3 Robbins and DeCenzo (2005: 12) visually summarise managers' time spent on managerial activities.

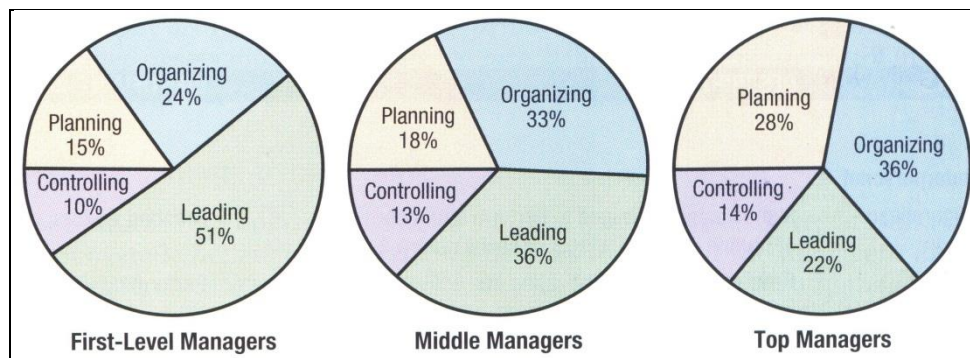


Figure 3: Time distribution per managerial activity according to level of manager  
*Source: Robbins and DeCenzo (2005: 12)*

Kotter (1999) reports in a study conducted with 15 successful general managers in nine corporations in cities across the United States, that managers' activities do not necessarily conform to the traditional activities described above, but rely on agenda setting and network-building to deal with the challenges of their jobs. The challenges, according to Kotter (1999: How effective executives approach their jobs), involve "deciding what to do despite uncertainty and a large amount of potentially relevant information", as well as getting work done through many diverse persons, despite having little control over most of them.

**Agenda setting** involves setting goals, priorities, strategies and plans of short-, medium-and long-term responsibilities. In order to gather information for agenda setting, managers rely more on personal (people) sources than impersonal sources

such as books and magazines. These personal sources are individuals with whom they have relationships and need not be people with the same job or functions as they have (Kotter 1999: How effective executives approach their jobs).

**Network building** involves a conscientious effort on the part of a manager to develop a network of co-operative relationships with people whom the manager feels will help fulfil his/her agendas. These networks may include, but are not exclusive to, subordinates. The networks may include peers, bosses and outsiders on whom managers rely to achieve their agendas (Kotter 1999: How effective executives approach their jobs).

### **2.2.2.3 General managerial behaviours**

Managers in different organisations behave in similar ways. One of the defining contexts of managerial work according, to De Alwis, Majid and Chaudhry (2006: 363), is “immediacy and the cultivation and use of soft skills”. Managers need to determine quickly what is happening and therefore prefer speed to accuracy of information (Streatfield 1984: 420; Katzer and Fletcher 1992: 235; Niebuhr and Gericke 2002: 10). Other general behaviours of managers include:

- Managers prefer spending large amounts of time with people, including subordinates, bosses and outsiders. Information sharing, decision-making and advice through updates are preferable through face-to-face contact or over the telephone (Katzer and Fletcher 1992: 235; Kotter 1999: How effective executives approach their jobs; Niebuhr and Gericke 2002: 10; De Alwis, Majid and Chaudhry 2006: 363). Kotter (1999: What should top managers do) adds that managers do not limit their information sharing to their planning and staffing activities, but also engage in topics not associated with their work roles. Mackenzie (2003: 64) agrees that by socialising and interacting with people, inside and outside the organisation, helps them to accumulate information and store it for when the need arises, either through “on the job judgement formation or decision making”.
- Managers have large workloads and spend long hours at work (Katzer and Fletcher 1992: 235).

- Streatfield (1984: 420) and Katzer and Fletcher (1992: 235-236) agree that managers work is “fragmented and characterised by frequent interruptions”.
- Reading activities involve scanning during the workday and in-depth reading at night and on weekends (Niebuhr and Gericke 2002: 10 citing Katzer and Fletcher 1992).

All these behaviours indicate that managers are extremely busy people. Levin (1991: Information seeking activities), in a study of the information seeking behaviour of top level municipal and county government officials in Northern California, United States of America (USA), says that the nature of local government itself and therefore their managers can be described as “hurried, subject to interruption and interaction”.

Levin (1991: Information seeking activities) cites Hale (1989) who concurs with this, stating that city managers spend up to 70 percent of their working hours in conversation, either by telephone or in scheduled and non-scheduled meetings.

These traditional management activities, agenda setting and network building, and general behaviour of managers influence managers’ information behaviour, in this case information needs and information seeking behaviour.

### **2.2.3 Information needs**

This sub-section firstly conceptualises information needs, then discusses how information needs arise or evolve. Characteristics of information needs follow this section, before finally discussing managers’ information needs.

#### **2.2.3.1 Conceptualisation of information needs**

An information need, as defined in Chapter One, is the recognition or realisation by a person that his or her knowledge is inadequate to satisfy a goal that he or she has (Case 2012: 5). Case (2012: 5) states that “need is an awkward concept as it is not easily observable”. Information needs are often deduced after some action has taken place (Case 2012: 90).

### 2.2.3.2 How information needs arise or evolve

Case (2012: 81) states that Robert Taylor, who is often cited in information science literature, says that there are four levels of information needs. These are:

- Visceral need: this is the unexpressed need for information. Ikoja-Odongo and Mostert (2006: 147) explain that the need itself may be conscious or unconscious, but none-the less it is unexpressed. “Unease” may be evidence of the visceral need (Ikoja-Odongo and Mostert 2006: 147).
- Conscious need: is the next level a person reaches where the need is expressed. At this point the expression of the need may be ambiguous and indecisive (Ikoja-Odongo and Mostert 2006: 147).
- Formalised need: is the next level, where the need is stated as a rational statement.
- Compromised need: is the level reached when a question may be posed to a librarian or an information retrieval system (Case 2012: 81). Case (2012: 82) continues that this stage is “a compromise between how the requester originally envisions the query and how the query must be restated to match the language used by the source”.

Belkin’s writings on information behaviour mirror Taylor’s concept of visceral need (Case 2012: 83). Belkin’s anomalous state of knowledge (ASK) is the driver of information seeking. An ASK happens when an individual recognises there is a gap or an uncertainty in their state of knowledge concerning a problem or situation. To resolve this, information seeking is embarked upon.

Brenda Dervin’s (1996) theory maintains that an information need arises when an individual wants to make sense of a problem or a situation or wants to understand something.

Wilson (1997: 42) reasons that there is an “affective, psychological as well as a cognitive basis for perceiving a need”. He adds that the factors that give rise to a need may be personal, organisational (work roles), interpersonal (social) or environmental (e.g. political).

### **2.2.3.3 Characteristics of information needs**

Krikelas (1983: 8-9) stresses that information needs may be immediate or deferred. Immediate needs are directed at solving a special problem and activities associated with satisfying immediate needs are information seeking behaviour. Deferred needs are potential needs that remain unconscious and hidden. They are associated with information gathering. Information gathering involves receiving stimuli and holding it in storage until a need for it arises, in which case it will be recalled.

Krikelas (1983: 11) believes that another characteristic of an information need is that it may be a continuous need or a discrete need. Krikelas (1983: 11) defines a continuous need as “ongoing and is associated with work, life or both”, while a discrete need has some urgency to it but, once solved, it may never be considered again. What is significant for this study is the realisation that managers often encounter discrete issues covering a range of topics. However, they also have continuous problems, such as those experienced in their daily tasks. Krikelas (1983: 12) states that conscious information needs often represent discrete events.

Courtright (2007: 275) cites Gross (1999), who postulates that information needs, when identified, may “not always originate in the seeker but rather may be imposed on the seeker by a third party”.

### **2.2.3.4 Information needs of managers**

De Alwis, Majid and Chaudhry (2006: 364), in their review of literature on the transformation in managers’ information seeking behaviour, found that managers need information at two levels, namely:

- a) “The immediate business or task environment to guide them in their operational decision-making and
- b) The broader business environment for long-term planning”.

The day-to-day information needs of managers include wanting to solve problems, such as employee conflicts and customer complaints, making decisions or increasing their understanding and broadening their knowledge about certain issues.

Concerning the broader business environment, it is important for managers to know or learn about developments in the environment, as this affects the survival and

performance of the organisation (Auster and Choo 1994: 607). This, then, represents a need that must be fulfilled by scanning the environment. Scanning, a form of information seeking, will be discussed in the section on information seeking of managers.

Mackenzie (2003: 75) emphasises that “managers’ information needs are not static and isolated but ongoing”. This is essentially the same as Krikelas’s (1983: 11) continuous need. Since managers have ongoing or continuous needs they require a storehouse of information from which to draw when the need arises. Mackenzie (2003: 64) explains that this is the reason why managers need to accumulate information. This is a form of information seeking that will be discussed in the section that follows.

#### **2.2.4 Information seeking**

This sub-section presents a discussion on the conceptualisation, and some forms of information seeking. This is followed by factors that affect information seeking before discussing managers’ information seeking. A discussion of managers’ information source preferences concludes this sub-section.

##### **2.2.4.1 Conceptualisation of and forms of information seeking**

Case (2012: 89) observes that most empirical studies do not bother to provide a definition of information seeking, as it is taken for granted that it is a response to a need for information. It is often typically defined in terms of active and intentional behaviour. However, this is not always the case. Information seeking does not necessarily have to be in response to a specific need. A large part of information seeking focuses on its purposive and problem-based nature, but it can also be passive, directed or undirected (Wilson, cited in Courtright 2007: 275).

Undirected and semi-directed browsing is also a form of information seeking. Here the seeker does not follow systematic steps to reach an outcome, but follows clues as they emerge (Bates 1989, cited in Courtright 2007: 274).

Another form of semi-directed browsing is scanning. Choo (1994: 23) states that “scanning involves searching for information about a specific question as well as viewing information or being exposed to information without there being a specific information need”. Environmental scanning is especially crucial for managerial information seeking, as will be discussed under managers’ information seeking.

Courtright (2007: 274) adds accidental discovery as another form of information seeking that takes place while searching actively for something else; much like Erdelez’s (2005) information encountering described earlier in the theoretical framework of the study.

Information accumulation, postulated by Mackenzie (2003: 65), is a form of information seeking that is not triggered by a need. Rather it precedes the emergence of a need. This theory, which is especially relevant for managers, posits that managers come into contact with information that is both relevant and irrelevant to what their work roles require. This information is accumulated and stored in the ‘cognitive savings account’ of the manager and will be drawn upon when the need arises.

#### **2.2.4.2 Factors that affect information seeking**

The characteristics of the information seeker (age and educational level, for instance), as well as the setting in which the seeker works, are two key factors that influence information seeking (Majchrzak 1986, cited by Levin 1991: Patterns of information gathering). The intervening variables described in section 2.1.1 are the factors that support or prevent information seeking. These are psychological predispositions (e.g. curiosity), demographic background (e.g. age and education), social role (in this case, manager), environmental variables (e.g. availability of resources) and the characteristics of sources (e.g. their accessibility and credibility). The characteristics of information sources will be discussed in the section on information source preferences (section 2.2.4.4). Time may also be a factor that affects information seeking. For managers, who are busy people, this factor is significant. As mentioned earlier, managers prefer speed to accuracy. Although managers require information almost immediately, the accuracy of the information

must not be compromised especially when it comes to making decisions that affect the lives of the citizens of the municipality.

#### **2.2.4.3 Managers' information seeking**

Environmental scanning is a form of information seeking behaviour that managers engage in, in order to understand the environment to improve organisational performance and ensure its survival (Choo 1994: 23). Choo (1994: 23) defines environmental scanning as “the acquisition and use of information about events and trends in the external environment of the organisation”. The scanned information would assist in planning and decision-making. It includes not only actively searching for specific information but also being exposed to any information that could potentially affect the organisation (Auster and Choo 1994: 608). Information sources are used to scan the environment. Choo (1994) conducted a study of environmental scanning by chief executive officers in the Canadian telecommunications industry and the information sources they used. Auster and Choo (1994) also conducted a study that focused on how senior managers acquire and use information in environmental scanning. Both internal and external sources of information were used to keep track of developments in the external environment. The section on source preferences will provide more details concerning the findings of these studies.

Case (2012: 311) reports on a study of 19 Portuguese firms, conducted by Correia and Wilson (2001). The aim of the study was to discover the factors that influence environmental scanning. The finding was that the more open the organisation is to its environment the greater the chances that the employees will be exposed to relevant information.

Traditionally, needs precede information seeking. Mackenzie (2003: 64) reasons that this is not always the case and thinks that managers face problems that do not always “produce a clear need”. It is an ongoing or continuous need. For managers to get ahead and survive in their complex environment they need to constantly gather and accumulate information, not only for what their work roles demand, but beyond this; that is information that is not related to their work roles. The accumulated information is processed and stored in a ‘cognitive savings account’ and when day-to-day decision-making is required; this store of information is tapped into

(Mackenzie 2003: 66). Mackenzie (2003: 64, 66) adds that the information accumulation reduces the complexity in the information environment and allows for quick decision-making without having to engage in a formal information search. After conducting a study of 52 managers and 52 non-managers in a United States of America (USA) based corporation, Mackenzie (2003) proved her hypothesis that managers do, in fact, gather information they do not need in order to simplify their work environment and make speedier decisions. According to Mackenzie (2003: 74), managers spend a large percentage of their time “interacting, socialising and politicking with people both in and out of the organisation”. This behaviour enables managers to come into contact with vast quantities of information that is then stored in their cognitive savings account.

#### **2.2.4.4 Managers’ information source preferences**

Krikelas (1983: 14) considers that information emanates from one of two sources, namely:

- The information seeker himself or herself. Krikelas (1983: 14) states that the “seeker generated source includes stimuli stored in one’s memory or personal files”. These are obtained by information gathering; or the seeker may engage in direct observation.
- An outside source which includes people who know, or, according to Krikelas (1983: 15), “a record of that knowledge – the literature”. User studies reveal that, of the external sources consulted, there is a strong preference for face-to-face liaison. The reason for this is that the source is perceived to contain important information based on the fact that access to them is easily gained. This convenience, however, does not consider the accuracy of the source. An impersonal source (the literature) is often consulted as a last resort (Krikelas 1983: 15).

Choo (1994: 35-36) feels that source classification may be either internal or external to the organisation and either personal or impersonal. Personal sources, also called informal sources (e.g. customers, subordinates, bosses) are considered ‘rich’, as face-to-face contact or telephone conversations allow for one to get feedback instantly and allow for the observation of ‘additional cues’. Impersonal sources include publications, conferences, libraries and databases. They are sometimes

called formal sources. Choo (1994: 36), in a study of information source usage of chief executive officers (CEOs) while engaging in environmental scanning, found that the CEOs preferred internal information sources, as they are able to adapt the information to the organisation's needs.

De Alwis, Majid and Chaudhry (2006: 365), in their review of the literature on managers' choice of source preferences, found that before the 1980s, in the 1990s and in the new millennium, informal sources or people sources were the primary source of information. The reason for this is accessibility and ease of use, being able to get a clearer picture of issues and a high level of perceived credibility and trustworthiness of people. This review revealed that during the 1980s and 1990s electronic sources were the least consulted sources, compared to oral and print sources. Electronic sources include e-mails, web logs, commercial online databases, propriety databases, company intranets and the internet. De Alwis, Majid and Chaudhry (2006: 365) state that in the new millennium information and communication technologies (ICT's) have "revolutionised the workplace and present today's managers with ready access to a vast array of information sources and channels". Not much literature is available on managers' information source preferences regarding information and communication technologies (De Alwis, Majid and Chaudhry 2006: 366).

Niebuhr and Gericke (2002: 18) report that in their study of managers in the Council for Geosciences in South Africa, personal contact with colleagues, consulting peers and external contacts were the most accessible sources. With regards to information requirements, that is, the preferred format of information, the respondents preferred full-text articles, followed by e-mails, as opposed to the verbal format. The reason for this, according to Niebuhr and Gericke (2002: 23), is probably due to "scientific credibility of verbal communication".

De Alwis and Higgins' (2001: Preference for sources ...) study of Singapore's managers' information behavioural patterns found that personal sources such as personal contacts, subordinate managers and colleagues were given a "very high preference". According to De Alwis and Higgins (2001: Preference for sources ...) the choice of sources was attributed mainly to "prior experience and easy access and

because it was recommended". Also revealed in their study was a similar trend for newspapers for reasons of ease of accessibility and recommendation by others. Jorosi's (2006: 103) study of information behaviour of small and medium enterprises (SMEs) in Botswana's manufacturing industry found that personal and impersonal sources were used. The usage of libraries and electronic sources was poor. The choice of the information source was due to accessibility and ease of use, while relevance and reliability were not of high priority. What the Jorosi (2006: 104) study found was that SME managers used impersonal sources such as newspapers and broadcast sources more frequently than personal sources. Although personal sources were also widely used, this is slightly inconsistent with other studies.

#### **2.2.4.5 Factors influencing managers' information source preferences**

The literature on managers' information source preference described above reveals that the factors that influence the preference of information sources include accessibility, ease of use, reliability, relevancy and prior experience. These factors are presented below, but not in this particular order.

**Accessibility and ease of use:** Wilson (1997: 45) stresses that without access to information sources, no information seeking is likely to take place. Accessibility (based on physical effort) and ease of use (based on psychological effort) are factors that influence information source preferences (De Alwis, Majid and Chaudhry 2006: 365). Accessibility refers to how easy it is to approach, obtain, or contact the channel, with no consideration for the quality of the source. People sources and informal networks are easily accessible (De Alwis, Majid and Chaudhry 2006: 366).

Levin (1991: Patterns of information gathering), citing Chen and Herson (1982), states that ease of access, as well as convenience and perceived helpfulness, are valued by information seekers. Here, as well, people sources are preferred over written sources. Levin's (1991: Types of information and sources) study of the information behaviour of local government officials in the United States revealed a contradiction to the Chen and Herson (1982) study. The contradiction is that top-level managers preferred written sources to people sources. Levin (1991: Types of

information and sources) speculates that one of the reasons could be the “high education level of the respondents”.

De Alwis, Majid and Chaudhry (2006: 371-372) identify four dimensions of source preferences. Under each dimension, the factors that influence source preference are:

- Informational dimension: factors under this dimension are accessibility, as described above, quality of the sources (i.e. accuracy, authoritativeness, credibility, reliability and currency), response speed of the source and information richness.
- Personal/socio-cultural dimension: factors under this dimension are age, educational qualification, gender and work experience.
- Context dimension: factors included here are work related roles, access to technology, position in the organisation and the nature of the tasks.
- Situational/organisational/environmental dimension: these include factors associated with the organisation and include the organisation’s size, mission and goals, the technology available and the corporate culture.

Factors that fall under the informational dimension are “given main weight” in the review of literature undertaken by De Alwis, Majid and Chaudhry (2006: 372).

## **2.3 Summary**

This chapter provided details of the theoretical framework that underpins the study. Wilson’s (1996) general model for information behaviour was chosen as the most suitable model for the study. The theoretical framework was followed by the literature review, which began by discussing the context of the study and then outlining the nature of managers’ work, as this determines their information needs. The concept information needs was conceptualised before managers’ information needs were discussed. Information seeking behaviour, in general was presented, before managers’ information seeking was discussed. Since information seeking includes source preferences, managers’ preference of information sources and the factors that influence them were highlighted. This concluded the literature review section. The next chapter will address the methodological aspects of the study, including justification for the chosen methodology.

## **CHAPTER THREE: RESEARCH METHODOLOGY AND METHODS**

Research methodology, according to Quinlan (2011: 177), indicates “how the research was conducted and what philosophical assumptions underpinned the research”, while research methods, according to Case (2012: 202), refer to “the specific ways, tools and techniques of observation and measurement”.

The present study investigated the information behaviour of managers in the Msunduzi Municipality’s business units, in order to adapt or design and deliver an information service that would be effective for the achievement of manager’s job objectives. Specifically, it addressed the following research questions: what are the information needs of managers? How do managers meet these needs? What are the information source preferences of managers? What are the barriers experienced by managers during information seeking?

Chapter Three focuses on the methodological aspects of the study, particularly on the research paradigm, research approach, research design, population, sampling, data collection, data analysis, validity and reliability and ethical considerations. The research methodology was determined by the nature of the data that needed to be collected to answer the research questions (Leedy and Ormrod 2005: 93).

### **3.1 Research paradigm**

A paradigm is a particular worldview that dictates to the researcher who adopts this view, what is acceptable to research and how (The School of Education, Training and Development, UKZN 2010: 20). This study was based on the post-positivist paradigm. The post-positivist paradigm came after, and is based on, the positivist paradigm. Positivism postulates that the scientific method is the best way to investigate the social world (Wagner, Kawulich and Garner 2012: 53). Therefore quantitative data, exact measures and objectivity are associated with positivism. Wagner, Kawulich and Garner (2012: 53) state that positivism received much criticism around the middle of the twentieth century, resulting in a modification of the paradigm. The modification arose because it was realised that the world cannot be known with absolute certainty. The School of Education, Training and Development,

UKZN (2010: 20) put it this way: “the world cannot be completely known we can only get close enough”. According to Wagner, Kawulich and Garner (2012: 53), both positivists and post-positivists share commonalities, such as there is “a reality independent of our thinking that can be studied through the scientific method”, but post-positivism argues that “it can be known only imperfectly because of the researchers’ human limitations”. Post-positivists reason that objectivity is achievable through multiple measures and observations, as well as triangulation of the data (Wagner, Kawulich and Garner 2012: 55). Another commonality postulated by Terre Blanche and Durrheim (1997: 6) and The School of Education, Training and Development, UKZN (2010: 20) includes having the same goals which are “to describe, explain and predict phenomena”. The researcher remains objective and detached, so as to draw unbiased conclusions. Wagner, Kawulich and Garner (2012: 55) observe that both positivism and post-positivism do share much in common, but the best fit for social science research approaches and practices is the post-positivist paradigm.

Although the interpretive paradigm which arose as a critique of positivism and post-positivism would be the most likely choice of paradigm for the social sciences, since it aims to understand or give meaning to how we understand the world, the present study chose to adopt the post-positivist paradigm. The reason for this was that one of the researcher’s aims was to investigate objective facts about managers’ information behaviour and not the meanings attached to these facts. Another aim was to describe, explain and predict how managers interact with information, specifically how they seek information in response to a need. This would be generalisable to managers in other municipalities. The interpretive paradigm does not aim to generalise, but rather to understand how people make sense of their world or phenomena.

### **3.2 Research approach**

There are generally two approaches to research, quantitative and qualitative. Leedy and Ormrod (2005: 94) maintain that quantitative research “answers questions about relationships among measured variables with the purpose of explaining, predicting and controlling phenomena as well as generalising to other persons and places”.

Quantitative data is numerical and can be quantified. Qualitative research describes phenomena from the participant's point of view and involves in-depth descriptions. Qualitative research is linked to the interpretive paradigm. According to Neuman (2006: 151), positivism is the paradigm that quantitative researchers rely on. Since the present study was based on the post-positivist paradigm (a modification of positivism), the logical choice of approach was quantitative. The goal of this study was to describe and explain the relationship between the information needs and seeking behaviour of managers in the Msunduzi Municipality, with the possible intention of generalising the results to level four managers in other municipalities. Although a qualitative approach would seem to be appropriate for the study of information behaviour, it was not the intention of the researcher to elicit in-depth descriptions of actions from the respondents' (managers') perspectives. The very nature of managers' work (for example, busy work schedules) would have made it difficult to set up interviews with, because of the limited time available for the completion of the study. In addition, quantifiable data was considered sufficient to answer the research questions of the study.

### **3.3 Research design**

The literature on research methodology reveals some ambiguities regarding the concept of research design. De Vos (2005: 132-133) observes that, on one hand, some authors define research design as a "plan or blueprint for conducting the study". This definition is broad and includes sampling, data collection and data analysis plans. On the other hand, according to De Vos (2005: 132-133) some authors define research design as "the compact formulas given names such as case study, survey, classic experiment". The present study adopted the latter definition and opted for the survey design. Survey designs are often associated with the positivist paradigm, although they have also been increasingly associated with the interpretive paradigm (The School of Education, Training and Development, UKZN 2010: 38). O'Leary (2004: 152) defines a survey as "information gathered by asking a range of individuals the same questions related to their characteristics, attributes, how they live, or their opinions". The type of survey was descriptive. According to Leedy and Ormrod (2005: 179), "descriptive research examines a situation as it is and does not involve changing or modifying the situation under investigation, nor is it

intended to determine cause and affect relationships”. The idea is to describe the characteristics of the population; in this case the information behaviour of managers. The School of Education, Training and Development, UKZN (2010: 38), maintains that “surveys gather data at a particular point in time in order to describe the nature of existing conditions”. The advantages of surveys are that they are economical, generate standardised data and elicit candid responses (Babbie 2009, cited in Case 2012: 216).

Apart from the survey design, the literature search and review, which made up part of Chapter Two of the thesis, played a significant role in the research methodology. One of the purposes of a literature review, among the other purposes mentioned in Chapter Two, is to provide the context for a study’s methodological approach (O’Leary 2004: 79). O’Leary (2004: 79) states that a literature search and review critically evaluates methods typically used for studies similar to the research study in question. Jesson, Matheson and Lacey (2011: 9) emphasise that “the literature review can be a research method in its own right”.

### **3.4 Study population**

De Vos et al. (2002: 199) define a population as “the totality of persons, events, organisation units, case records or other sampling units with which the research problem is concerned”. The population consisted of 56 level four managers within the five business units of the Msunduzi Municipality. A list of level four managers provided by the human resources section of the municipality was used to identify the population studied.

### **3.5 Sampling**

It is often not feasible to survey the entire target population and a sample that is representative of the population is thus selected. According to Bawden and Robinson (2012: 319):

The aim of sampling is to choose entities (people, organisations and documents) so that they are representative of the larger population from

which they are drawn so that the results obtained have a more general validity beyond the particular entities which were studied.

Since the target population of this study was relatively small, it was deemed necessary to forego sampling and rather survey the entire target population, that is, a census of the study population was undertaken. According to O'Leary (2004: 154), "a census surveys every single person in a defined or target population". Gay and Airasian (2003: 113), cited in Leedy and Ormrod (2005: 207), advise that for "small populations (with fewer than 100 people or other units) there is little point in sampling". An advantage of a census is that it is the ideal way to study a population, as it provides the truest or most accurate measure of the population.

### **3.6 Data collection**

De Alwis, Majid and Chaudhry (2006: 372), in their comprehensive review of literature on the transformation in managers' information seeking behaviour, maintain that the popular data collection method used in the studies they reviewed was the self-administered questionnaire.

#### **3.6.1 The questionnaire**

This study's data collection instrument was a self-administered questionnaire. Bawden and Robinson (2012: 308) state that "questionnaires are regarded as being in the positivist style of research, since they assume that the researcher and those surveyed share a common perspective of the situation". Questionnaires are useful for collecting quantifiable data (The School of Education, Training and Development, UKZN 2010: 64; Burton and Bartlett 2009: 75). The objective of the current study was to collect quantifiable data and not individuals' opinions, perceptions or beliefs (The School of Education, Training and Development, UKZN 2010: 64). A structured, self-administered questionnaire was distributed by e-mail, via the Msunduzi Municipality's intranet, to the respondents, who were level four managers. The questionnaire (see Appendix 3) was made up of three sections, namely:

- Section one: focused on obtaining information on the respondents' demographics (age, gender, education level).

- Section two: focused on eliciting information on the information needs of the respondents.
- Section three: focused on how the respondents sought information, including their choice of information sources.

The questions were mainly closed ended, with some open-ended questions. The purpose of the research, as well as a confidentiality clause, was clearly stated in the introduction to the questionnaire.

The advantages of using a self-administered questionnaire are that they are an inexpensive form of collecting data, interviewer and respondent bias is not an issue and they are suitable for geographically dispersed study populations (Neuman 1997: 251). It was assumed that managers were literate and therefore were able to complete the questionnaire without the researcher's assistance. A drawback of self-administered questionnaires is low response rates, which have the potential to affect the validity and reliability of the study. In an attempt to moderate this issue, prior to the data collection, the respondents were informed about the impending data collection and subsequent to the distribution of the questionnaire a follow-up system was implemented, whereby the researcher reminded respondents via e-mail about completing the questionnaire. The questionnaire was distributed to the 56 managers via email on 23 September 2013. Follow-up reminders were sent out to those who had not responded on two separate occasions: 7 and 21 October 2013.

### **3.7 Data analysis**

The data collected in this study were of a quantitative nature, that is to say they were numeric. Statistics help to make sense of numerical data (Leedy and Ormrod 2005: 245). The latter authors define statistics as "computational procedures that allow us to find patterns and meaning in numerical data". Statistical techniques used by social researchers can be descriptive or inferential (The School of Education, Training and Development, UKZN 2010: 140). This study used descriptive statistics which, according to Babbie et al. (2011: 260), "allows researchers to describe or summarise the main features of the data or the relationships between variables in the data set". The purpose of inferential statistics is to make inferences or draw conclusions about a population from the data obtained in a sample (Wagner, Kawulich and Garner

2012: 203). The Statistical Package for the Social Sciences (SPSS) was the software package used to analyse the data. Before using SPSS, the raw data were prepared. This involved coding (giving numerical codes), entering and cleaning (checking for errors and correcting them). The computer program was used to generate a visual output of the data in the form of tables, graphs and charts. The open-ended questions were analysed using content analysis, which involved trying to make sense of the themes that emerged from the responses to these questions (Schutt 2006: 431).

### **3.8 Validity and reliability**

Validity and reliability, according to Case (2012: 208), are “important considerations in the choice of methods and construction of measures”.

Leedy and Ormrod (2005: 28) explain that “the validity of a measurement instrument refers to the extent to which the instrument measures what it is supposed to measure”. The face and content validity of this study’s research instrument was established by asking two academic experts in the School of Social Sciences, University of KwaZulu-Natal (Pietermaritzburg), to examine the questionnaire and provide feedback on improvements to the format and questions. Face validity refers to whether or not the instrument appears to measure what it sets out to measure and content validity refers to the representativeness of the content of an instrument (Leedy and Ormrod 2005: 92).

Reliability, according to Leedy and Ormrod (2005: 29), is “the consistency with which a measuring instrument yields a certain result when the entity being measured hasn’t changed”. In the present work, a pilot study was conducted to ensure reliability of the instrument. A pilot study involves pre-testing the questionnaire on a few people who are similar to the study population. The population for the pilot study consisted of managers from the Ethekwini Municipality in Durban, KwaZulu-Natal. These managers were equivalent to level four managers. The pilot study enabled the researcher to test for problems such as comprehension of the questions, ambiguities and mistakes. Some respondents in the pilot study needed clarity concerning terminology, for instance: what is an intermediary? The researcher then amended

the questionnaire by providing a brief definition of, as well as an example of, an intermediary. The feedback received from the pilot study enabled the researcher to modify the questionnaire to improve on the validity and reliability of the study. A reliability test using Cronbach alpha was administered. The test revealed a score of 0.79 (79%), which means that the questions in the questionnaire were satisfactory to answer the objectives of the study.

### **3.9 Research ethics**

According to Case (2012: 213), when investigating human beings, four general ethical guidelines are commonly applied. These are: no harm to participants, avoidance of participant deception, voluntary participation and making data confidential or anonymous.

#### **3.9.1 No harm to participants**

No participant must be physically or psychologically harmed. Psychological discomfort may be participant embarrassment when certain information of a sensitive nature is revealed. To this end this study ensured that the participants' responses were kept confidential.

#### **3.9.2 No deception of participants**

Case (2012: 214) stresses that participants "must be fully informed about the purpose of the study and the nature of the questions and observations that might be involved" although he adds that with information behaviour research this is not an issue. The present study informed the participants of the purpose of the study before inviting them to participate (see Appendix 2: participants' covering letter and consent form).

#### **3.9.3 Voluntary participation**

It is every individual's right to agree or not agree to participate in a research study, after understanding the purpose of the research, the research process and the consequences (Wagner, Kawulich and Garner 2012: 68). An informed consent form is the means by which participants are informed of the right to agree or not agree to

participate, as well as the right to withdraw from the study at any time. A covering letter, to which an informed consent form was attached (see Appendix 2), indicated that participation was voluntary and respondents could withdraw from the study at any point.

### **3.9.4 Confidentially of the data collected**

This study conducted an e-mail survey and therefore the participants could not remain anonymous, but their data was treated in the strictest confidence.

The study received ethical clearance (Reference number HSS/0651/013M) from the Humanities and Social Sciences Research Ethics Committee of the University of KwaZulu-Natal. Permission to carry out research in the Msunduzi Municipality was obtained from the organisation's gatekeeper (see Appendix 1).

### **3.10 Summary**

Chapter Three covered the methodological aspects of the study, that is, the "how" of the research process. This included first placing the study within the post-positivist paradigm tradition, since the aim of the study was to describe, explain and predict the information behaviour of managers. Because quantitative researchers rely on positivism/post-positivism, this was the approach chosen for the study. A survey design was used and a self-administered questionnaire was used to collect data from the study population. Every person in the study population was surveyed, that is to say that a census of the study population was undertaken. Since the data that was collected was numeric, it was analysed using statistical methods. The data was subjected to SPSS, which then presented the data using graphs, charts and tables to obtain answers to the research questions. Validity and reliability of the data collection instruments was presented, followed by the ethical considerations of the study. The following chapter presents and reports on the data that was collected.

## **CHAPTER FOUR: RESEARCH RESULTS**

Chapter Four presents and reports on the data that was collected using a self-administered questionnaire. The purpose of the study was to investigate the information behaviour of managers in the Msunduzi Municipality's business units, in order to adapt or design and deliver an information service that would be effective for the achievement of managers' job objectives. Specifically, the study addresses the following research questions:

- What are the information needs of managers?
- How do managers meet these needs?
- What are managers' information source preferences?
- What are the barriers experienced during information seeking?

The results of the empirical study are presented according to the arrangement of the sections in the questionnaire, namely, the respondents' demographics, the respondents' information needs, the respondents' information seeking patterns (including their information source preferences) and the barriers experienced during information seeking. This arrangement is based on the research questions listed above. In some instances the purpose behind the question is explained. The letter N indicates the number of respondents that have answered a particular question. Percentages are rounded off to one decimal place. The questionnaire referred to in this chapter can be found in Appendix 3.

### **4.1 Survey response rate**

A self-administered questionnaire was sent out to 56 managers as an attachment to an e-mail message. The number of responses received was 34, resulting in a response rate of 60.7%. According to Babbie and Mouton (2001: 261), a response rate of 50% is satisfactory for analysis, 60% is good and 70% very good. Using Babbie and Mouton's (2001: 261) guidelines concerning response rates, the response rate attained for this study, which is slightly above 60%, is considered good. The response rate for the study was most encouraging, for two reasons. The first is the fact that a self-administered questionnaire as a data collection instrument is known to have the limitation of low response rates. The second reason is the fact that the literature on the nature of managers' work suggests that managers have busy work schedules which might result in their not having time to complete the

questionnaire. The questionnaire was distributed to the 56 managers via e-mail on 23 September 2013. Follow-up reminders were sent to those who had not responded on two separate occasions: 7 and 21 October 2013. This was done in an attempt to increase the response rate.

## **4.2 Demographic information of respondents**

Section 1 of the questionnaire dealt with the respondents' demographic characteristics, namely, the business units they worked in, gender, age, educational level and experience as a level four manager. The purpose of the questions in this section was to elicit background information on the respondents. Each of these characteristics is presented, in turn.

### **4.2.1 Business units within which respondents worked**

The five business units are administrative units within the municipality. The response rates for the different business units revealed that there were an equal number of respondents, 10 (29.4%) each from the community services and corporate services business units. There were six (17.6%) and five (14.7%) respondents that worked in the financial services and infrastructure business units, respectively. Only three managers (8.8%) responded from the economic development business unit. Table 1 summarises these findings.

**Table 1: Respondents' business units**

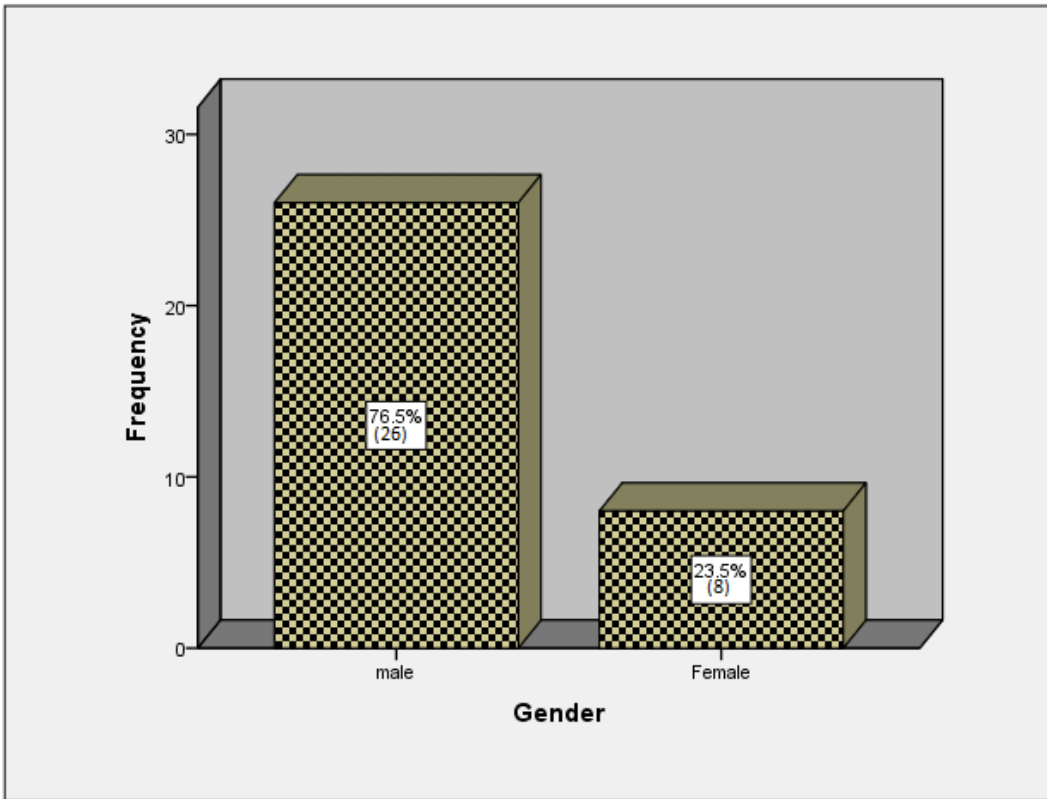
**N=34**

Business unit	Responses	
	Frequency	Percentage
Community services	10	29.4
Corporate services	10	29.4
Financial services	6	17.6
Infrastructure	5	14.7
Economic development	3	8.8
Total	34	100*

*\* The total percentage does not add up to exactly 100% because percentages have been rounded off to one decimal place.*

#### **4.2.2 Gender of respondents**

The respondents were predominantly male, 26 (76.5%), while females accounted for eight (23.5%) respondents. There were approximately three times more male than female respondents. This finding is depicted in Figure 4.



**Figure 4: Gender of respondents**

**N=34**

#### **4.2.3 Age of respondents**

The majority of the respondents, 16 (47.1%), were within the age range 41 to 50, followed by 13 (38.2%) within the age range 51 to 60. Three (8.8%) and two (5.9%) respondents belonged to the age ranges 30 to 35 and 36 to 40, respectively.

Therefore the largest proportion of respondents, 29 (85.3%), were between the ages of 41 and 60. Five (14.7%) respondents were between 30 and 40 years of age. Table 2 reflects these findings.

**Table 2: Age of respondents**

**N= 34**

Age group	Frequency	Percentage
30-35	3	8.8
36-40	2	5.9
41-50	16	47.1
51-60	13	38.2
Total	34	100

#### **4.2.4 Relationship between gender and age**

A cross tabulation was run between the variables gender and age, in order to establish whether or not there was an association between the age and gender of the respondents. The findings (Table 3) show that males were the predominant gender in age groups 36 to 40, with two (5.9%) respondents, 41 to 50, with 13 (38.2%) respondents, 51 to 60, with 10 (29.4%) respondents. Females on the other hand were the predominant gender in the youngest age group 30 to 35 with two (5.9%) of the three respondents for this category. This indicates that the youngest respondents were females.

**Table 3: Cross tabulation of gender and age group**

**N=34**

Gender	Age group				Total
	30-35	36-40	41-50	51-60	
Male	1	2	13	10	26
Female	2	0	3	3	8
Total	3	2	16	13	34

#### **4.2.5 Education of respondents**

More than half the respondents, 18 (52.9%), attained postgraduate degrees, 12 (35.3%) diplomas or tertiary certificates, and three respondents, accounting for 8.8%

of the respondents, attained an undergraduate degree. Table 4 shows these findings.

**Table 4: Education of respondents**

**N= 34**

Highest level of education attained	Frequency	Percentage
Postgraduate degree	18	52.9
Undergraduate degree	3	8.8
Diploma or tertiary certificate	12	35.3
No response	1	2.9
Total	34	100*

*\* The total percentage does not add up to exactly 100% because percentages have been rounded off to one decimal place.*

#### **4.2.6 Relationship between gender and education of respondents**

A cross tabulation of the variables gender and education level were run to establish whether or not there was an association between gender and level of education of the respondents. Of significance was the finding, shown in Table 5, that the majority of the respondents, 18 (52.9%), attained postgraduate degrees. There were 12 (35.3%) male respondents and six (17.6%) female respondents in the postgraduate degree category. This finding indicates that a high number of both males and females had attained postgraduate degrees.

**Table 5: Cross tabulation of gender and level of education**  
**N=34**

Gender	Highest level of education attained				Total
	Postgraduate degree	Undergraduate degree	Diploma or tertiary certificate	No response	
Male	12	2	11	1	26
Female	6	1	1	0	8
Total	18	3	12	1	34

#### 4.2.7 Relationship between age and education level

A cross tabulation was run to establish whether or not there was any relationship between age and education level of the respondents. Table 6 shows that of the five younger respondents in the age range 30 to 40, four (11.8%) had postgraduate degrees, while one did not respond. Of the 29 (85.3%) middle-aged respondents, in the age range 41 to 60, 14 (41.2%) had postgraduate degrees, 12 (35.3%) diploma or tertiary certificates, while three (8.8%) had undergraduate degrees. Of significance was the finding that, with the exception of one non-response, all the younger respondents attained the highest level of education, while among the middle-aged respondents there was a spread of the different levels of education attained.

**Table 6: Cross tabulation of age group and level of education**  
**N=34**

Age group	Highest level of education attained				Total
	Postgraduate degree	Undergraduate degree	Diploma or tertiary certificate	No response	
30-35	3	0	0	0	3
36-40	1	0	0	1	2
41-50	11	1	4	0	16
51-60	3	2	8	0	13
Total	18	3	12	1	34

#### 4.2.8 Experience as level four manager

The majority of the respondents, 16 (47.1%) had 6 to 10 years' experience as level four managers, seven (20.6%) had 0 to 5 years' experience, three (8.8%) each had 16 to 20 years and 21 to 25 years' experience, while two (5.9%) of the respondents had 11 to 15 years' experience as level four managers. Just one (2.9%) respondent had 25 to 30 years' experience as a level four manager. Two (5.9%) did not respond to this question. It can be seen that more than half, 23 (67.6%) of the respondents, did not exceed 10 years' experience as level four managers, while in terms of the longest service, four (11.8%) of the respondents had 21 to 30 years' experience. This situation is shown in Figure 5 below.

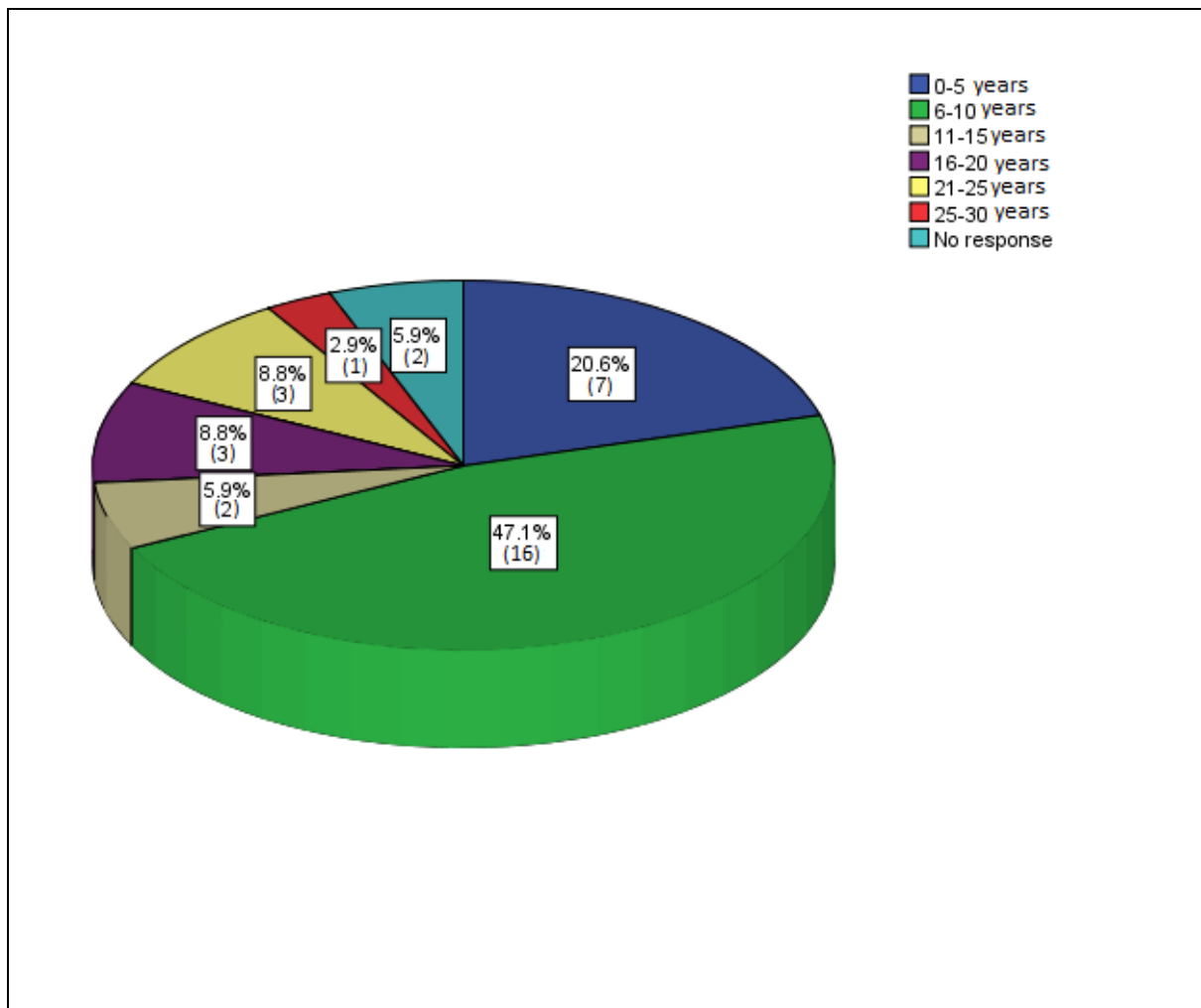


Figure 5: Years of experience as a level four manager

N=34

### **4.3 Information needs of respondents**

This section presents the responses to question 2.1 in the questionnaire (see Appendix 3), which attempted to discover the purposes for which information was needed. The list of information needs was drawn up based on previous empirical studies that were discovered during the review of the literature. Respondents were asked to indicate on a Likert 5-point scale the frequency of the need.

The data reflected on the Likert scale was converted into a rating scale. A weight factor was assigned to each category on the scale. The greatest weight was assigned to the category that reflected the greatest extent of the need (the “always” category). The weights that were assigned were: always = 4, often = 3, sometimes = 2, rarely = 1, never = 0.

The weighted mean for each need was calculated by adding the total responses in each category after it was multiplied by the assigned weight. This was then divided by the total number of respondents (Neuman 1997: 160-162).

The primary or main purpose for which the respondents need information is to keep abreast of developments in their field. This need received the highest ranking. This was followed by the need for information to broaden knowledge and the need for information to assist in decision-making, ranked second and third, respectively. The need for information to help solve problems and to build networks were ranked relatively low, in seventh and eighth places respectively. Table 7 provides a summary of these responses.

**Table 7: Information needs**

**N=34**

Purpose for which information is needed	Frequency						Weighted mean	Rank
	Always	Often	Sometimes	Rarely	Never	No response		
Keep abreast of developments	19	12	3	0	0	0	3.5	1
Broaden knowledge	12	20	2	0	0	0	3.3	2
Decision-making	16	9	6	1	1	1	3.1	3
Current affairs	9	14	9	1	1	0	2.9	4
Research	9	17	4	1	2	1	2.8	5
Personnel purposes	8	14	7	4	1	0	2.7	6
Legal information	7	13	12	1	1	0	2.7	6
Solving problems	8	10	10	4	2	0	2.5	7
Network building	7	8	11	6	2	0	2.4	8

#### **4.4 Information seeking behaviour**

The purpose of this section of the questionnaire was to elicit information on respondents' information seeking patterns. Information seeking patterns also include preferences for information sources.

#### 4.4.1 Time spent on information seeking

Question 3.1 in the questionnaire asked respondents to indicate the number of hours per week spent on actively seeking information. The data revealed that close to half of the respondents, 16 (47.1%), spent more than 10 hours per week actively seeking information. Respondents who spent 5 to 10 hours per week actively seeking information numbered 10 (29.4%), while eight (23.5%) spent less than five hours per week actively seeking information. It can be concluded that approximately half the respondents, 16 (47.1%), spent more than 10 hours per week seeking information, while the other half, 18 (52.9%), spent 0 to 10 hours per week actively seeking information (see Table 8).

**Table 8: Time spent actively seeking information**

**N=34**

Hours per week spent gathering information	Frequency	Percentage
Less than 5 hours per week	8	23.5
5-10 hours per week	10	29.4
More than 10 hours per week	16	47.1
Total	34	100

#### 4.4.2 Use of an intermediary to search for information

The purpose of question 3.2 in the questionnaire was to ascertain whether the respondents searched for information themselves or used intermediaries, in the form of personal assistants, librarians, colleagues, subordinates or family members, to help search for requisite information. The data revealed that the majority of the respondents, 21 (61.8%), did not use an intermediary, while 13 (38.2%) did. This is reflected in Table 9.

**Table 9: Use of intermediary to search for information**

**N=34**

<b>Uses intermediary to search for information</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	13	38.2
No	21	61.8
Total	34	100

#### **4.4.3 Type of intermediary used to search for information**

A follow-up to question 3.2 in the questionnaire involved investigating the type of intermediary used, if in fact an intermediary was used. The number of respondents that indicated that they did use intermediaries was 13 (38.2%). Therefore this question did not require the 21(61.8%) respondents who indicated no to question 3.2 to answer this question. Table 8 reflects the finding that six (46.2%) of the respondents engaged colleagues, making them the predominant type of intermediary engaged to search for information. This was followed by five (38.5%) of the respondents who engaged subordinates to search for them, while one (7.7%) respondent each engaged a personal assistant and a family member to search for them. Table10 shows these findings.

**Table 10: Type of intermediary used**

**N=13**

<b>Type of intermediary</b>	<b>Frequency</b>	<b>Percentage</b>
Personal assistant	1	7.7
Colleague	6	46.2
Subordinate	5	38.5
Family member	1	7.7
Total	13	100*

*\*The percentages are rounded off to one decimal place and therefore might not add up to exactly 100%.*

#### 4.4.4 Frequency of intermediary use

A follow-up to the question on the type of intermediary used was question 3.4 in the questionnaire, which queried the frequency of using an intermediary. The majority of the respondents, six (46.2%), indicated that an intermediary was sometimes engaged, three (23.1%) indicated that they often engaged an intermediary, while two (15.4%) respondents each indicated that they always or rarely engaged an intermediary to search for them. Figure 6 presents a visual depiction of this finding.

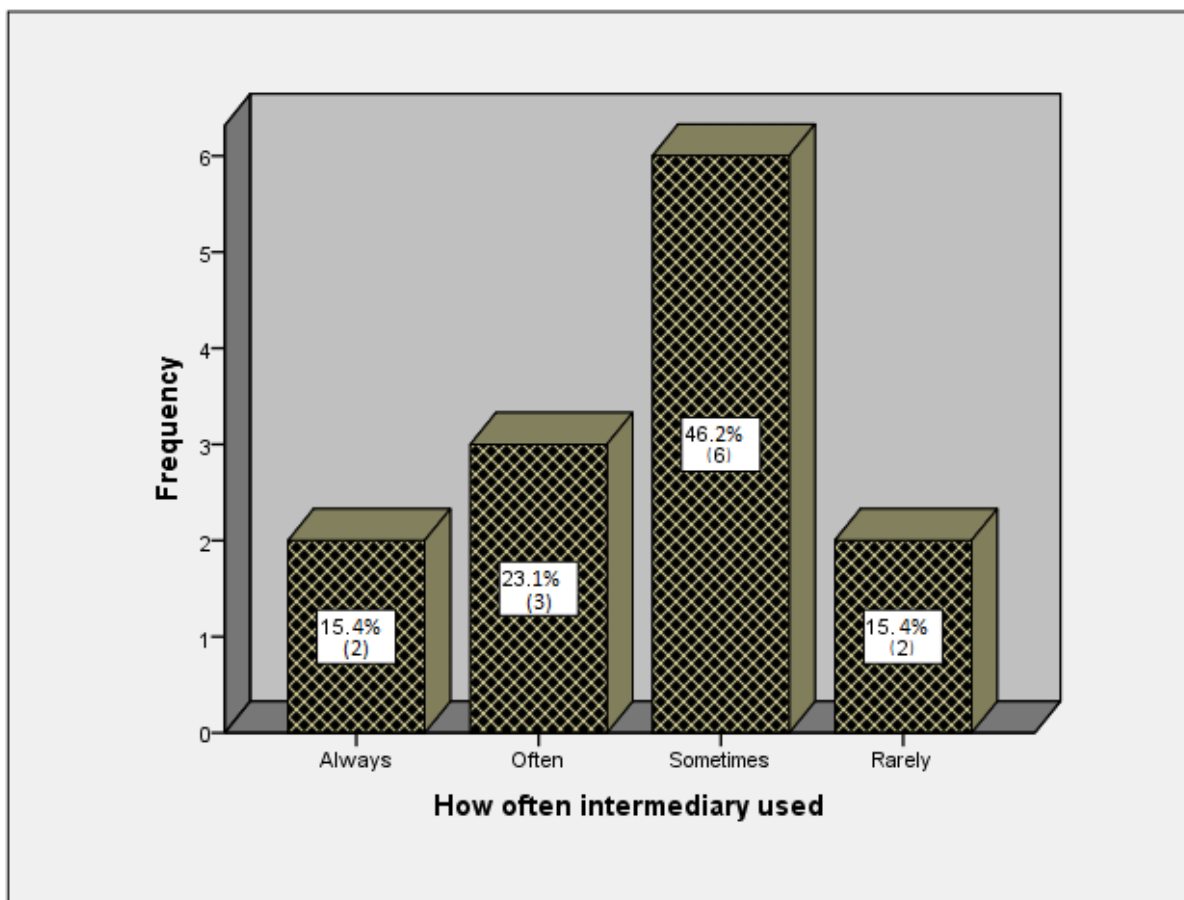


Figure 6: Frequency with which intermediary is used

N=13

#### 4.4.5 The use of libraries for information seeking

The purpose of this question, 3.5 in the questionnaire, was to ascertain whether or not libraries played a role in the respondents' information seeking. The majority of the respondents, 22 (64.7%), indicated that they did not use a library to search for

information, while 12 (35.3%) indicated that they did. The respondents that did not use a library were almost twice as many as those that did use a library. Table 11 presents this finding.

**Table 11: Visiting a library to search for information**  
**N=34**

Visits library to search for information	Frequency	Percentage
Yes	12	35.3
No	22	64.7
Total	24	100

#### **4.4.6 Type of library used to seek information**

Question 3.6 in the questionnaire is a follow-up to question 3.5. The purpose was to investigate the type of library used, if a library was used at all. Therefore this question required only those 12 (35.3%) respondents who indicated yes to using a library to search for information. Table 12 summarises the findings and shows that the respondents' own departmental libraries received the highest ranking, followed by public libraries, and ranked second. Academic libraries and virtual libraries were equally ranked in third place. Special libraries were the lowest ranked, in fourth place.

**Table 12: Type of library used to seek information**

**N=12**

Assigned weights: Always=4, often=3, sometimes=3, rarely=2, never=0

Library type	Frequency of library use					Weighted mean	Rank
	Always	Often	Sometimes	Rarely	Never		
Own departmental	3	4	1	0	0	2.2	1
Public	2	2	5	1	0	2.1	2
Academic	0	2	5	1	0	1.4	3
Virtual	3	1	1	0	0	1.4	3
Special	1	2	1	2	1	1.2	4

#### **4.4.7 Method of information seeking if a library was not used**

Question 3.7 in the questionnaire was open-ended. The aim was to elicit information on how respondents went about seeking information if they did not use a library. The respondents who did not use the library to search for information, as indicated in section 4.4.5 above, totalled 22 (64.7%). Therefore this question did not require the 12 (35.3%) respondents who did use a library to respond. Three themes were revealed from the data collected. The majority of the respondents, 19 (86.4%) indicated that they used the internet to find information, followed by seven (31.8%), who indicated that people were their source of information, while four (18.2%) of the respondents used their management information systems (MIS) to find information. Table 13 shows this finding. In some instances, more than one response per theme was received and therefore the total count does not add up to 22, or the total percentage to 100.

**Table 13: Method used to gather information**

**N=22**

Method of gathering information	Responses	
	Frequency	Percentage
Internet	19	86.4
People	7	31.8
MIS (Management information system)	4	18.2

#### **4.4.8 Respondents' interest in any new information**

The literature reveals that not all information seeking is preceded by a need. Managers come into contact with information that is relevant, as well as irrelevant, to their work. This information is accumulated and stored and will be tapped into when a need arises. The purpose of question 3.8 in the questionnaire was to discover whether or not the respondents did accumulate information. Table 12 shows that a substantial proportion of the respondents, 21 (61.8%), were very interested, 10 (29.4%) of the respondents were moderately interested, while one, accounting for 2.9 % of the respondents, was slightly interested in new information. The data also reveals that two (5.9%) remained neutral when answering this question. Table 14 presents these findings.

**Table 14: Interest in new information**

**N=34**

Interest in any new information	Frequency	Percentage
Very interested	21	61.8
Moderately interested	10	29.4
Neutral	2	5.9
Slightly interested	1	2.9
Total	34	100

#### **4.4.9 Information source preferences**

Question 3.9 in the questionnaire asked respondents to indicate on a Likert scale the extent of information source utilisation. The findings indicate that the internet was the most highly ranked information source. Colleagues as information sources were ranked second, followed by online government documents and personal contacts, which received an equal ranking in third place. Textbooks, printed journals and online newspapers received the lowest rankings, in ninth and tenth place respectively. A summary of these findings is found in Table 15.

**Table 15: Information source preferences****N=34**

Assigned weights: Always=4, often=3, sometimes=3, rarely=2, never=0

Information sources	Frequency						Weighted mean	Rank
	Always	Often	Sometimes	Rarely	Never	No response		
Internet	23	5	3	1	1	1	3.4	1
Colleagues	7	14	9	0	0	4	2.6	2
Online govt docs	11	11	2	5	2	3	2.5	3
Personal contacts	10	11	6	1	2	4	2.5	3
Printed newspapers	10	7	9	4	0	4	2.4	4
Printed govt docs	9	6	8	3	1	7	2.2	5
Subordinate managers	4	11	10	3	1	5	2.1	6
Online journals	3	13	8	2	1	7	2.0	7
Textbooks	4	5	17	1	0	7	1.9	8
Printed journals	2	6	13	5	0	8	1.7	9
Online newspapers	3	3	8	6	6	8	1.3	10

#### 4.4.10 Factors that influence information source preference

The pattern that emerges from the factors influencing information source preference is that reliability, ranked in first place, was the factor that had the most influence, when it came to source preference. This was closely followed by accessibility and relevancy, ranked second and third, respectively. Prior experience and ease of use were factors that were ranked equally in fourth place, making them factors that did not have much influence when selecting information sources. Table 16 gives a clearer picture of the findings.

**Table 16: Factors influencing information source preference  
(tabulated as a frequency)**

**N=34**

Assigned weights: Extremely influential=4, very influential=3, somewhat influential=2, slightly influential=1, not at all influential=0

Factors	Degree of influence						Weighted mean	Rank
	Extremely influential	Very influential	Somewhat influential	Slightly influential	Not at all influential	No response		
Reliability	20	10	2	0	0	2	3.4	1
Accessibility	18	11	1	2	0	2	3.2	2
Relevancy	17	11	2	0	0	4	3.1	3
Prior experience	11	15	5	0	0	3	2.9	4
Ease of use	14	12	2	3	0	3	2.9	4

#### 4.4.11 Awareness of local public library services

A substantial proportion of the respondents, 29 (85.3%), were aware of the availability of internet services offered by the local public library. This was closely followed by 27 (79.4%) respondents indicating that they were aware of the availability of all South African published and produced material. Literature searches and interlibrary loans were known by 21 (61.8%) and 18 (52.9%) of the respondents, respectively. Table 17 shows these results.

**Table 17: Awareness of local public library services**

**N=34**

Public library services	Responses	
	Yes	Percentage
South African published material	27	79.4
Interlibrary loans	18	52.9
Literature searches	21	61.8
Internet services	29	85.3

*The total count and percentage does not add up to 34 or 100, respectively, since this was a multiple response question.*

#### 4.4.12 Barriers to information seeking

Lack of time was the barrier to information seeking that was ranked in first place, followed by lack of access and inadequate resources, both equally ranked in second place. Lack of skills in using library resources and the lack of knowledge of information sources were ranked third and fourth, respectively. Language was not considered a serious barrier to information seeking and therefore received the lowest ranking, in fifth place (see Table 18).

**Table 18: Barriers to information seeking  
(tabulated as a frequency)**

**N=34**

Assigned weights: High=3, medium=2, low=1

Barriers to information seeking	Level of barrier				Weighted mean	Rank
	High	Medium	Low	No response		
Lack of time	18	8	6	2	2.2	1
Lack of access	7	14	10	3	1.7	2
Inadequate resources	9	11	9	5	1.7	2
Lack of skills in using library resources	2	16	13	3	1.5	3
Lack of knowledge of information sources	2	12	14	6	1.3	4
Language	0	4	25	5	1.0	5

## 4.5 Summary

The data collected for the study revealed that, concerning the demographic characteristics of the respondents, there were predominately more male than female respondents. A substantial proportion of these respondents were within the age range 41 to 60. All the respondents had attained some form of tertiary level of education. More than half the respondents did not have experience exceeding 10 years as a level four manager. Concerning the information needs of the respondents, the greatest need for information was to keep abreast of developments in their field, while the need for information for network building received the lowest ranking.

Approximately half the managers spent more than 10 hours per week actively seeking information, while the other half spent 0 to 10 hours per week actively seeking information. The majority of respondents did not use an intermediary to search for them. Of those that did use an intermediary, it was a colleague who was the popular choice. Intermediaries were used some of the time. More than half the respondents did not use a library to search for information. Of those respondents that did, the respondents' own departmental library was always a popular choice. A high percentage of the study population used the internet to search for information. A substantial proportion of the respondents indicated that they were very interested in any new information. The internet was by far the information source of preference. The pattern that emerged from factors influencing information source preference was that reliability was the factor that had the most influence when it came to source preference. More than half the respondents were well aware of the local library's services. A lack of time was the greatest barrier to information seeking. Language however, was not much of a barrier.

This chapter presented the results of the empirical study, according to the structure of the questionnaire, which was organised according to the research questions. The next chapter will provide an interpretation of the findings of this study.

## **CHAPTER FIVE: INTERPRETATION OF THE RESULTS**

Chapter Five discusses the empirical findings presented in the previous chapter. The interpretation of the data collected through a self-administered questionnaire will be undertaken with reference to the research questions and the literature reviewed. The theoretical framework that underpinned the study will be drawn into the discussion. Concluding this chapter will be some general limitations of the study, followed by a summary of the chapter.

The purpose of the study was to investigate the information behaviour of managers in the Msunduzi Municipality's business units in order to adapt or design and deliver an information service that would be effective for the achievement of managers' job objectives.

The interpretation of the results follows the sequence of the sections in the questionnaire, which is also mainly the order of the study's research questions.

### **5.1 Demographic profile of survey respondents**

Section 1 of the questionnaire was made up of questions that elicited demographic information, namely, the business units respondents worked in, and the gender, age, educational level and experience as a level four manager. The purpose of these questions was to provide background information on the respondents. These characteristics will be discussed, in turn.

#### **5.1.1 Business units within which respondents worked**

The Msunduzi Municipality has five business units, namely, community services, corporate services, financial services, infrastructure services and economic development. The response rates for these business units varied, except for community services and corporate services, which received the same percentage of responses, 10 (29.4%) each. These two business units accounted for more than half the responses, 20 (58.8%). Financial services, infrastructure services and economic development cumulatively accounted for 14 (41.2%) of the responses.

### **5.1.2 Gender of respondents**

The respondents were predominantly male, accounting for 26 (76.5%) of the respondents. The male respondents numbered more than three times that of female respondents, eight (23.5%). This implies that gender equity has not pervaded this level of management in the municipality.

### **5.1.3 Age of respondents**

The results revealed that the majority of managers, 29 (85.3%) were in the age range 41 to 60. There was a relatively small percentage, five (14.7%) of younger managers, who were aged 30 to 40. Level four managers were therefore predominantly middle-aged (Collins student dictionary 2006).

### **5.1.4 Relationship of gender and age**

Although females were not the predominant gender in the study, there were predominantly more females in the youngest age group, 30 to 35 compared to the males being predominant in the 36 to 40, 41 to 50, and 51 to 60 age groups. One of the regulatory frameworks for gender equity in South Africa is the Employment Equity Act 55 of 1998. According to Dupper and Bhoola (2009: 3), the aim of this act was to “regulate equality and discrimination in employment”, as a means of redressing the imbalances created by the apartheid philosophy. Although the findings of the current study indicate that gender equity has not pervaded this level of management, the fact that the newer recruits are predominantly female shows that this would very likely be the trend in the future.

### **5.1.5 Education of respondents**

The respondents were well educated, with all of them having some form of tertiary education. More than half of them, 18 (52.9%) had postgraduate degrees, 12 (35.3%) had a diploma or tertiary certificate and three (8.8%) had attained an undergraduate primary degree. The majority of the respondents, 18 (52.9%), had attained postgraduate degrees, indicating a high level of education among managers. Regarding the relationship between gender and education, the majority of males, 12 (35.3%), and females, six (17.6%) possessed postgraduate degrees.

### **5.1.6 The relationship between age and education level**

The study found that all the younger respondents, four (11.8%) had the highest level of education, while among the middle-aged respondents there was a spread of the different levels of education achieved. It can be concluded that the newer recruits are very likely to have a high level of education, in other words they will be highly qualified managers.

### **5.1.7 Experience as level four manager**

The largest proportion of respondents, 16 (47.1%), had 6 to 10 years' experience as a level four manager, while seven (20.6%) had 0 to 5 years' experience. More than half the managers, 23 (67.6%), did not exceed 10 years' experience as level four managers. Four (11.8%) of the respondents had 21 to 30 years' experience, making them the longest serving level four managers.

The demographic profile of the respondents places the study in context. In terms of the model that underpins this study (Wilson's 1996 model), the demographic profile 'populates' the person in context/the context of the information need component of the model. The demographic profile is also considered to be one of the intervening variables that could either support or prevent information seeking by managers.

## **5.2 Information needs of respondents**

The main reason for which managers needed information was to keep abreast of developments in their field. This was regarded as the most important need, having received the highest ranking. Following this, information was needed to broaden knowledge and assist in decision-making, ranked second and third, respectively. Keeping abreast of developments ensures that managers employ current, up-to-date practices to increase organisational performance. De Alwis, Majid and Chaudhry (2006: 364) have concluded that keeping abreast of developments in one's field is essential for long-term planning. De Alwis, Majid and Chaudhry (2006: 364) confirm that decision-making and broadening of knowledge are immediate or day-to-day needs. Information needed to solve problems and build networks, however, received the lowest rankings, seventh and eighth, respectively. This is surprising since level four managers would need information to solve problems, whether they are

personnel related or customer service related. The finding that information needed to build networks received the lowest ranking is inconsistent with some of the studies reviewed. One study that shows this inconsistency is that of Kotter (1999), where network building was essential (and therefore highly ranked) for managers' gathering of information for their agenda setting. Mackenzie's study (2003: 64) is another that shows this inconsistency. Mackenzie (2003: 64) places much emphasis on networking and interacting with people in order to accumulate information, for when the need arises. In the current study there is a surprising inconsistency with how managers perceive network building. In terms of the purpose for which information is needed, information to build networks was ranked the lowest yet, in terms of information source preferences, people sources were ranked relatively high.

### **5.3 Information seeking behaviour patterns**

This section deals with interpreting the results concerning how the needed information was acquired by managers. Of the various ways information is acquired, the active search mode of Wilson's (1996) model was applied to the study. This means that the pattern of actively seeking information was investigated.

#### **5.3.1 Time spent on information seeking**

The results revealed that almost half, 16 (47.1%) of managers spend more than 10 hours per week actively seeking information, while 10 (29.4%) spend 5 to 10 hours searching and eight (23.5%) spend less than five hours per week searching for information. According to the Basic Conditions of Employment Act 75 of 1997, schedule one, which sets out the minimum employment standards, South Africans work approximately 40 hours per week. Of significance:

- Concerning the 16 (47.1%) managers that spend more than 10 hours per week searching for information, 10 hours (the minimum) would be approximately 25% or one quarter of their work week spent on information seeking. This indicates that approximately half the managers spend a significant amount of time actively searching for information.
- The category that spends 5-10 hours per week searching for information amounts to 10 (29.4%).

- It can be concluded from the above that 26 (76.5%) managers spend five hours, plus, actively searching for information. Five hours, plus, can also be considered a significant amount of time spent on actively seeking information.

This finding is consistent with the study of SME managers in Botswana by Jorosi (2006), where the author concluded that an average of five hours weekly was spent on information seeking and this was considered to be a significant amount of time. The literature reviewed revealed that managers have busy work schedules. Despite this fact, the managers in the current study indicated that a significant amount of time was dedicated to searching for information. Information is valued by managers. Choo (1994: 15) aptly states that “information is the raw material of managerial work”.

### **5.3.2 The use of an intermediary to search for information**

The results revealed that the majority of 21 (61.8%) of the respondents prefer not to use an intermediary to search for information, while 13 (38.2 %) of the respondents do make use of an intermediary. Managers, as indicated by the literature study, are busy people, who operate under extreme time pressure. It is to be expected that they would consider engaging an intermediary to search for information and so save time. This, however, is not the pattern that emerges from this study. Managers in the Msunduzi Municipality prefer to search for information themselves. Perhaps managers rely on their own judgement of the usefulness and relevance of information and do not trust a third party, who may filter relevant information or may provide excessive unnecessary information.

### **5.3.3 Type of intermediary used to search for information**

The findings reveal that, of the managers that engaged an intermediary to search for information, close to half (46.2%) of them engaged colleagues to search for them, followed by five (38.5%) of them using subordinate managers. Personal assistants and family members were not popular choices as information intermediaries, since they were chosen by just one (7.7%) manager each. Colleagues and subordinates work in the same environment as the manager and are more likely to know what the manager requires, compared to family members who may not understand the manager’s work environment. Personal assistants may not be skilled in information retrieval or *au fait* with the manager’s job.

### **5.3.4 Frequency of intermediary use**

Almost half (46.2%) of the respondents that indicated that they did engage an intermediary, engaged them some of the time. This is followed by three (23.1%) of the respondents who 'often' used an intermediary. The 'always' and 'rarely' options were selected by relatively few respondents, two (15.4%). It can therefore be concluded that the greatest extent of intermediary use was 'sometimes'. The interpretation of this finding may once again be attributed to lack of trust in engaging a third party to search for information.

### **5.3.5 The use of libraries for information seeking**

The pattern that emerged from enquiring about the use of libraries for information seeking was that only approximately one third (35.3%) of the respondents used a library to search for information. A substantial majority, approximately two thirds (64.7%) of the respondents, indicated that they did not use a library to search for information. This could be attributed to the fact that managers are hard-pressed for time and prefer speed to accuracy (Niebuhr and Gericke 2002: 10), or managers have an immediate need for information (De Alwis, Majid and Chaudhry 2006: 363) and visiting a library would be time-consuming.

### **5.3.6 The type of library used to seek information**

A follow-up to the question on whether the respondent visited a library to seek information was the type of library or libraries visited. Respondents' own departmental library was ranked the highest, followed by the public library, ranked second. Academic and virtual libraries were equally ranked in third place, while special libraries received the lowest ranking (fourth). Respondents' high ranking of their own departmental library could be attributed to the fact that the library is easily accessible and mainly has specialised information that would be relevant for the manager. For this study, the special library was not a popular choice, perhaps due to the fact that the Msunduzi Municipality does not have many other special libraries that deal with the functions of the business units. It is to be noted that a library is traditionally understood to be a 'physical space'; therefore perhaps the researcher should not have included the virtual library as an option, as suggested by some of the pre-test respondents. Virtual libraries would have been covered in the question

on how respondents acquired information if a 'traditional' library was not used. The present researcher therefore acknowledges this oversight as a limitation to the study.

### **5.3.7 Method of information seeking if a library was not visited**

Question 3.7 (see Appendix 3) in the questionnaire was an open-ended question that required those respondents who did not use a library or libraries to search for information to indicate how they sought and acquired information. Three themes emerged from the responses to this question. These were:

- The internet: the majority of the respondents, 19 (86.4%), sought information using the internet. It is assumed that the internet would include electronic databases, as well as searching the World Wide Web.
- People: people as a source of information were selected by seven (31.8%) of the respondents.
- MIS: the MIS was an option selected by four (18.2%) of the respondents.

Of immense significance is the high percentage of managers that use the internet. Since ICTs, specifically the internet has pervaded every aspect of society, including the workplace; it is not surprising that this was the most popular information source. De Alwis, Majid and Chaudhry (2006: 374) conclude that there was a gap in the literature on managers' information source preferences, specifically regarding the development of ICTs. This study found that ICTs have impacted the managers' work environment.

There is a resounding indication in the reviewed literature that people as sources of information are a popular means of acquiring information (Choo 1994: 35; Kotter 1999; De Alwis and Higgins 2001: 13; Niebuhr and Gericke 2002: 18; De Alwis, Majid and Chaudhry 2006: 365). The fact that people were selected as a source of information in this study is therefore in line with the literature studied.

Management information systems (MIS) are made up of reports and documents that are internal to the organisation. Relevant journal articles and current affairs information that would be useful for managers, for instance, are not covered by this system. MISs are used for operational and technical decisions (Daft and Lengel 1983: 20). They do not carry information about the broader environment. The small

number of four (18.2%) managers who use the MIS would probably do so mainly for technical information.

### **5.3.8 Respondents' interest in any new information**

The finding that more than half the respondents, 21 (61.8%), were very interested in any new information, even if it did not relate to their areas of responsibility, concurs with the findings of Mackenzie (2003), that managers engage in information accumulation as a form of information seeking. Managers accumulate and so build a storehouse of information for when the need arises in their day-to-day activities. As mentioned in Chapter Two, a need does not always precede information seeking. Katzer and Fletcher (1992: 236) cite Brewer and Tomlinson (1964), who feel that the reason for information accumulation is that managers fear being caught without information. Mackenzie (2003: 74) states that information is accumulated by "interacting, socialising and politicking with people", within and outside the organisation. The present study found that people as sources of information (colleagues, personal contacts) was ranked among the top three sources of information.

### **5.3.9 Information source preference**

The internet was the information source that was most frequently utilised by the respondents. This is not surprising, considering that the internet has pervaded all aspects, of society including the workplace. As mentioned in sub-section 5.4.7, there is a gap in the literature on ICT's as an information source for managers. Of the few studies available, the study by Choo (1994: 37), on information source utilisation by CEOs in the Canadian telecommunications industry, revealed that ICTs were not utilised, due to the fact that "they are too complex; require substantial time and effort to learn and their information is too general to be useful". Cognisance must be taken of the fact that when this study was conducted in the early 1990s, ICTs had not impacted the workplace as it has today. De Alwis, Majid and Chaudhry (2006: 365) concur with this conclusion.

Colleagues, personal contacts and subordinate managers are regarded as informal or people sources. Two of these, colleagues and personal contacts, were ranked

among the top three most utilised information sources. After the internet, they were ranked second and third, respectively. The literature review concerning information source preference revealed that people or informal sources were the highly preferred information sources (Choo 1994: 35-36; De Alwis and Higgins 2001: Preference for sources of information...; Niebuhr and Gericke 2002: 18; De Alwis, Majid and Chaudhry 2006: 365). The reasons for the high ranking of people sources is that they are easily accessible, people provide a clearer picture and understanding of issues and people are perceived to be credible and trustworthy sources of information (De Alwis, Majid and Chaudhry 2006: 365). One study that did not find personal sources as the most utilised type of information source was that of Levin (1992: Types of information sources). In Levin's (1992) study, part of the reason for managers' non-preference for personal sources was due to their high level of education.

Regarding printed sources, printed newspapers and printed government documents were ranked in the middle of the scale, in fourth and fifth place, respectively. However, the present study found that textbooks and printed journals received fairly low rankings, eighth and ninth place, respectively. Since managers require information quickly, these types of sources would require more time to access them.

#### **5.3.10 Factors that influence information source preference**

There are various factors influencing information source preference, namely, the respondents' demographic characteristics, work context factors such as task complexity, quality of the sources and accessibility of the sources. The options for this question in the questionnaire were based on the review of the literature. De Alwis, Majid and Chaudhry (2006: 372) reviewed the literature on the transformation of managers' information seeking behaviour and concluded that reliability, accessibility, relevancy, prior experience and ease of use are considered to have the most influence concerning choice of information source. Therefore the present study offered these options in the questionnaire, including an open option 'other'. The results of the study revealed that reliability received the highest ranking, followed by accessibility and relevancy, ranked second and third, respectively. Reliability and relevancy denote quality of the source, while accessibility does not.

Accessibility refers to how easy it is to approach or obtain the source. Accessibility therefore denotes convenience. Prior experience and ease of use were equally ranked the lowest, in fourth place, indicating that, relative to the other factors, these factors had the least influence when selecting which sources to use.

It can be concluded from the results that quality of the information source was of paramount importance. Accessibility of sources is important, but not in the same way as quality. In terms of the literature study, De Alwis and Higgins (2001), as well as Jorosi (2006), found that, among other factors that influence source preference, the common factor was ease of access or accessibility.

Since managers occupy a pivotal position in the organisation and are responsible for the implementation of policies, strategies and decisions, the quality of the information sources cannot be overstated.

#### **5.3.11 Awareness of local public library services**

The findings reveal that more than half the respondents were well aware of the local public library's services, such as the availability of all South African published and produced material, interlibrary loans, literature searches and internet services. The library services referred to are those that are relevant for the managers' work roles and activities. A substantially high proportion, 29 (85.3%) of the respondents were aware of the internet services offered by the library, followed by 27 (79.4%) who were familiar with the status and implication of the legal deposit status of the library. Literature search services and interlibrary loans services were known by 21 (61.8%) and 18 (52.9%) of the respondents, respectively. All told, the local public library services were fairly well known by the managers.

#### **5.3.12 Barriers to information seeking**

The results show that the greatest barrier to information seeking was lack of time. Lack of access and inadequate resources were ranked equally in second place. Lack of skills required to use library resources and lack of knowledge of information sources were ranked third and fourth, respectively. Language received the lowest ranking and was therefore not considered a serious barrier to information seeking. The literature study supports the finding that lack of time is a difficulty managers

have to contend with (De Alwis, Majid and Chaudhry 2006: 374). Lack of access refers to lack of access to resources. Inadequate resources, together with lack of access to resources, were considered a barrier which can possibly be attributed to funding constraints in the municipality. The language barrier was ranked the lowest, possibly because managers were fairly highly educated people.

## **5.4 Interpretation of the results in relation to Wilson's (1996) model**

This section focuses on interpreting the results based on the model that underpinned the study, the Wilson (1996) model. Figure 1 in sub-section 2.1.1 depicts the Wilson (1996) model. The various components of the Wilson (1996) model include the person in context, activating mechanisms, intervening variables, information seeking and acquisition and information processing and use. These will be presented, in turn.

### **5.4.1 The person-in context**

Niedwiedzka (2003: The context) states that a need is influenced by the "context which can be the person him or herself or the role the person plays in work and life, or the environments (social, political or economic, etc.)". The information needs of managers must be understood in the context of their work environment, or the professional role they play. The particular role they play indicates specific needs. Level four managers in the municipality require information that would reduce uncertainty in their work role. As managers they require information to keep abreast of developments in their field, to broaden their knowledge bases, to make decisions regarding goals and strategies, to solve problems like public grievances and to be informed about current affairs, for research purposes, for personnel purposes and for network building.

### **5.4.2 Activating mechanisms (motivators to seeking information)**

Not every need drives managers to seek information. The stress/coping theory drawn from psychology explains this. In the manager role, the bigger the stress connected to decision-making or solving a problem, the greater the motivation to seek information (Niedwiedzka 2003: The mechanisms that activate information behaviour). Wilson feels that risk/reward theory explains why, in certain situations, people may seek information and in some situations they may not. If the perceived

risk of not engaging information seeking is great, the motivation to seek information will be great. This theory also explains why certain information sources are used more frequently than others.

#### **5.4.3 Intervening variables**

The intervening variables either support or prevent information seeking and are of five types (Case 2012: 155). These are:

- Psychological predispositions of managers: these include managers' personality and their curiosity.
- Demographic background: demographic characteristics such as age and education level of managers, influence information seeking. The younger managers may be more adept with electronic information sources. However, in the present study there are predominantly more middle-aged managers, yet the internet is the information source of preference. Also evident from the results of the study is the fact that the majority of managers possess postgraduate degrees confirming the high education levels of managers. The fact that managers are well educated means that they are very likely to be aware of all possible information sources that would be relevant for their jobs; and are likely to possess the skills to utilise these sources.
- Social role: the respondents in this study play the role of managers, who occupy a crucial position in the organization, namely that of working through operative employees to implement, with success, the plans, strategies and targets of the organisation. The role of manager indicates specific types of information needs.
- Environmental variables: these include the availability of resources in the organisation. The availability of information sources depends on the economic situation of the municipality. A sound economic position indicates that there will be no budgetary restrictions in terms of access to information sources. This, then, will support information seeking.
- Characteristics of sources: The current study found that the quality of information sources is of paramount importance. Sources considered to be reliable and relevant are more likely to be selected. Accessibility is also important, but to a lesser extent than the quality or credibility of the source.

Wilson and Walsh (1996: Information source characteristics) add “channel of communication”, through which information is received as a characteristic of information source. This is important for managers who, according to the literature review and the findings of the current study, regard informal personal sources as very important compared to formal sources such as printed matter.

#### **5.4.4 Information seeking and acquisition**

The various ways that information is acquired, according to Wilson and Walsh (1996: Information seeking and acquisition), consists of four modes, namely:

- **Passive attention:** listening to the radio or watching television, where no intended seeking takes place, but information is consequently acquired. The majority of the managers indicated that they would be interested in any new information even if it did not involve their area of responsibility. Discovering this new information would take place during the passive attention mode, when the manager is engaged with something else and comes across relevant information that could then be banked in their cognitive savings account for when the need arises.
- **Passive search:** unintentional searching leads to acquiring relevant information. As above, new information that is relevant is discovered by chance while actively searching for something else.
- **Active search:** the manager would actively and intentionally seek out information. The current study investigated the active information seeking patterns of managers.
- **On-going search:** this is carried out to update information (already acquired) or widen knowledge. Managers often need to engage in this type of searching to keep abreast of developments in their field in order to improve organisational performance. Environmental scanning is a form of on-going search for information. Choo (1994: 23) states that environmental scanning is “the acquisition and use of information about events and trends in the external environment of the organisation”.

#### **5.4.5 Information processing and use**

The information acquired by the user (or manager in this case) is incorporated into his or her knowledge and is utilised directly or indirectly to influence the environment and may consequently create new information needs, repeating the cycle (Niedwiedzka 2003: Phase of information processing and use). Wilson and Walsh (1996: Information processing and use) add that information processing is just as subjective as the information need itself and is not directly observable, as it is a cognitive process. The processing and use of information was not investigated in the current study.

#### **5.5 General limitations of the study**

Information behaviour, by its very nature, would best be understood by adopting a qualitative approach (face-to-face interviews, focus group discussions or direct observation). This study, however, adopted a quantitative approach, in view of the strong evidence presented in the literature review that managers have busy work schedules and therefore making time for interviews and focus group discussions would prove challenging. Cognisance of this fact was taken, especially given the time limitation for the completion of a coursework master's degree. However, any information on managers' information behaviour, even if only of an indicative nature, was deemed essential to address the gap in the literature on local government managers' information behaviour.

The focus of the current study was the information behaviour of managers in the Msunduzi Municipality's business units, specifically their information needs and information seeking behaviour. Another concept that is germane to information behaviour is information use. Managers' use of information was not the focus of this study, as a qualitative study of this concept would be the most suitable approach; and for the reasons presented above, this would have proven challenging for the requirements of research for a coursework master's degree.

A study of managers' information behaviour in the local government sector has not been done in the South African context. This study hopes to address this gap, albeit with a study that provides information of an indicative nature rather than an in-depth

understanding of managers' information behaviour. This implies that this study could be used as a springboard for future qualitative studies of managers' information behaviour.

## **5.6 Summary**

Chapter five presented an interpretation and discussion of the findings of the study. The interpretation of the results was done according to the sequence of the sections in the questionnaire, which also happens to be the order of the study's research questions. The interpretation was premised on the review of the literature, as well as the Wilson (1996) model, which underpinned the study. Some general limitations of the study were presented. The next chapter presents a summary of the study's findings, the conclusions drawn and recommendations for an effective library service, as well as recommendations for further research. The conclusions and recommendations are based on the study's research results and the interpretation thereof.

## **CHAPTER SIX: SUMMARY OF RESEARCH FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents a summary of the research findings, the conclusions and the recommendations of the study. The summary of the research findings and conclusions are based on the purpose of the study, which was addressed through its four research questions. The recommendations of the study include the recommendations for an effective library and information service for managers, as well as recommendations for further research.

The purpose of the study was to investigate the information behaviour of managers in the Msunduzi Municipality's business units, in order to adapt or design and deliver an information service that would be effective for the achievement of managers' job objectives. The following research questions guided this investigation:

- What are the information needs of managers?
- How do managers meet these needs?
- What are the information source preferences of managers?
- What are the barriers experienced by managers during information seeking?

### **6.1 Summary of research findings and conclusions**

The findings of the empirical study were based on data collected by means of a self-administered questionnaire, distributed to managers by e-mail via the Msunduzi Municipality's intranet. This subsection follows the sequence of the study's research questions.

#### **6.1.1 Managers' information needs**

The literature study revealed that the purposes for which managers need information include keeping abreast of developments in their fields, broadening of knowledge, decision-making, current affairs, research, personnel purposes, legal information, solving problems and network building. These options, based on previous empirical studies reviewed in the literature, were presented in the questionnaire, including an 'other' option to give them an opportunity to mention anything left out. The results revealed that managers in the Msunduzi Municipality's business units rate

information that keeps them abreast of developments in their fields, that broadens their knowledge, and that assists in decision-making, as very important. Information gleaned from keeping abreast of developments in their fields and broadening of their knowledge bases can be used to improve organisational performance and, in turn, ensure that the quality of life of the inhabitants of Msunduzi is improved.

### **6.1.2 Information seeking patterns of managers**

The information seeking patterns of managers refer to the 'how' of meeting managers' information needs, including their information source preferences.

Managers spend a significant amount of time searching for information, with more than half of them spending not less than a quarter of their work week actively seeking information. This is an indication of the realisation of the value of information in organisations.

Managers in the Msunduzi Municipality prefer searching for information themselves, as opposed to engaging intermediaries to do so for them. Of the third of the managers that do use intermediaries, they are mainly used some of the time. A qualitative study of information behaviour of managers would have elicited the possible reasons for not engaging intermediaries. With the researcher having adopted a quantitative approach, it can only be speculated that perhaps intermediaries are not perceived as skilled enough at filtering relevant information. The preferred choice of intermediary was colleagues and subordinates.

The use of libraries for information seeking was not practised by the majority of managers. Of the one-third of managers that did use libraries, libraries within their own departments were ranked highly. Since libraries can also be regarded as an information source, this therefore means that libraries are not a popular source of information for managers.

Information accumulation in this study is the building up of a storehouse of information for use when the need arises. This would involve showing interest in any new information, even if it did not pertain to a manager's field of expertise. A

convincing 32 (94.1%) respondents showed some degree of interest in any new information, with more than half the managers indicating that they would be very interested.

Concerning information source preferences, both personal and impersonal sources were used by managers. The top four sources given the highest rankings included the internet, colleagues, online government documents and personal contacts. The internet, ranked in first place, and online government documents ranked in third place, are forms of electronic information sources. This indicates that ICTs have impacted managers' work environments. The literature study revealed that personal sources were the preferred type of information sources (Choo 1994: 35; Kotter 1999: In gathering information...; De Alwis and Higgins 2001: Preference for sources ...; Niebuhr and Gericke 2002: 18; De Alwis, Majid and Chaudhry 2006: 365; Jorosi 2006: 103). The current study's findings are consistent with these studies since the results of the current study revealed that personal sources were ranked among the top three information sources.

The factors that influence information source preference are numerous, but of significance are the following: reliability, relevancy, accessibility, prior experience and ease of use. These factors, according to De Alwis, Majid and Chaudhry (2006: 372), are "given main weight" in their review of the literature on "the transformation of managers information seeking behaviour". Reliability and relevancy, according to Choo (1994: 27), are measures of quality of information. In this study reliability was considered to carry the greatest weight when selecting information sources. Accessibility, a measure of convenience and not quality, was ranked second in the current study. It can therefore be concluded that, while convenience of the information source has a great influence on information source selection, quality of the information source has a greater influence on information source selection.

Since reliability (an indicator of quality) was the factor that influenced source preference in this study, and the internet was found to be the most utilised information source, it follows that the internet is perceived to be reliable. The quality of information on the internet is not regulated; there are no strict guidelines for accuracy, authoritativeness, currency or objectivity (O'Leary and O'Leary 2010: 43).

The contents of websites must be evaluated to determine their reliability. The use of trained information professionals (located at the Msunduzi Municipal Library) to evaluate and filter relevant information would be beneficial to managers.

In terms of the services of the local public library (Msunduzi Municipal Library), more than half of the managers were aware of the benefits of having a depository library as well as its various services. This finding is at odds with the finding of minimal use of the library. Here it can also be concluded that if a qualitative study was undertaken, possible reasons for the minimal use of the library and its services could be ascertained.

Managers' greatest barrier to information seeking is lack of time. This concurs with the literature studied (Levin 1991: In addition to the information explosion...; Katzer and Fletcher 1992: 235; Niebuhr and Gericke 2002: 10; De Alwis, Majid and Chaudhry 2006: 363). Electronic information sources are the preferred type of source of managers. There is a plethora of information available through electronic sources and this can lead to information overload for managers. It can be concluded that the library can play a beneficial role in information seeking by managers. The skilled information professional at the library can save managers a great deal of time by filtering quality, relevant information.

## **6.2 Recommendations of the study**

This section presents a discussion of recommendations for an effective library and information service for managers, as well as recommendations for further research.

### **6.2.1 Recommendations for an effective library and information service for managers**

The purpose of the current study was to investigate the information behaviour of managers; specifically the information needs and information seeking behaviour of managers in the Msunduzi Municipality's business units, in order to adapt or design and deliver an information service that would be effective for the achievement of the job objectives of managers.

The ultimate aim of the investigation was to adapt or design new information services that would meet this user group's information needs. This subsection provides some recommendations pertaining to the provision of an effective information service for managers.

As mentioned in the background to the study in Chapter 1, section 1.1, the inhabitants of the Msunduzi Municipality have access to a library service (the Msunduzi Municipal Library), which has the status of being one of the legal deposit libraries in South Africa. Therefore, with an existing information service that has a wealth of information and which provides some relevant information services, there is no need to design a new information service to meet the managers' information needs. Instead, as reflected in the empirical findings of the current study, it can be deduced that the Msunduzi Municipal Library needs to adapt its existing reference services in terms of how this wealth of information can be delivered to the manager user group. Some recommendations in this regard are:

- The introduction of a selective dissemination of information (SDI) service. SDI is a current awareness service that is an alerting service in which articles, books, or any materials (in any format) of relevance to managers' jobs are disseminated to managers in the various business units. This would aid managers in keeping abreast of developments in their fields, as well as broadening their knowledge bases, two of the most important needs reflected in the findings of the current study. SDI would involve creating a profile of managers, including their area of responsibility. New documents relating to managers' fields of interests will be scanned periodically by the reference librarians and relevant items will be selected and managers notified about the new material. SDI could be done manually, or by computer. Since the group of managers is fairly small, manual SDI would be feasible. SDI could be done concurrently with the routine scanning of new acquisitions by the reference and periodicals sections of the library. The dissemination of this information could be done using the following channels:
  - E-mail, via the Msunduzi Municipality's intranet.
  - The library's newsletter, which is published once a month and distributed via the municipality's intranet to all Msunduzi municipal staff. This newsletter could have a section dedicated to a listing of the

library's new acquisitions of reference and periodicals materials.

Reviews of some of the acquisitions could be provided.

- With the proliferation of social media such as Facebook and Twitter in society at large, managers would be familiar with this technology and its applications. Facebook and Twitter are services that have personalised applications; therefore new material could be disseminated to managers using social media.
- Since lack of time was found to be the greatest barrier to information seeking in the current study, trained information professionals could be of immense help, especially with the filtering of the vast amounts of information available on the internet and through electronic databases. The library's reference librarians could market their services as skilled information intermediaries to managers. Furthermore, these librarians could undertake to repackage information for the various managers. In this way, managers may not need to spend much time actively seeking information, but expect to receive their requisite information from the librarians, with minimal visits to the physical library.
- In terms of cost-cutting measures for the municipality, the Msunduzi Municipal Library could subscribe to propriety databases, based on managers' suggestions. The various business units would not need to subscribe individually to these databases; easing the pressure on their budgets.
- Pursuant to the current study, the reference section of the Msunduzi Municipal Library should commit to undertaking an information audit. According to Pantry and Griffiths (2009: 14):

The basic function of information audits is to assess a user's, community's or organisations' information needs, to identify what it already holds, and to report on the gap between the two as a basis for action.

Although the current study is in some way an information audit that used a quantitative approach for gathering information, an in-depth study of managers' information behaviour which elicits information from the managers' perspective would make it a richer information audit, providing a clearer picture of the manager user group and its information needs.

- Since the study revealed that libraries are not popular sources of information, the Msunduzi Municipal Library needs to revisit its marketing strategies. Visual displays of the services offered and the types of information available at the library could be put up periodically. It is to be noted that the library, which is strategically situated within the municipality, has an auditorium, which is often used for municipal staff and business meetings. Managers attending these meetings are sure to catch a glimpse of these displays.

### **6.2.2 Recommendations for further research**

A study of local government managers, specifically level four managers, being the level that works closely with operative employees, is essential in South Africa's young democracy. Local government is tasked with eradicating the imbalances of the apartheid era and ensuring the improvement of the quality of life of all South Africans. Managers in local government occupy a pivotal position in the organisation, since they work through others to initiate this transformation, which is vital for South Africa's democracy.

Apart from the contribution of this study to the transformation of South African society, the study also provides baseline data about the information needs of managers, as a distinct user group of the Msunduzi Municipal Library. In this way the library services moves one step closer to fulfilling its ultimate aim of meeting the information needs of its user communities.

Further research could be undertaken by replicating the current study, except that a qualitative approach to the study could be adopted. Qualitative studies provide a richer understanding of information behaviour that cannot be captured by quantitative means. This is especially true for investigating the development and use of ICTs in the workplace.

Managers' information use which was not addressed by the current study could be investigated, since this is a germane aspect of information behaviour that has received little attention in the literature concerning information behaviour.

As indicated by the dearth of literature on information behaviour of managers in government organisations in South Africa, another suggestion would be to initiate studies that examine the information behaviour of managers at other levels of management (middle and senior management) in the South African government context.

### **6.3 Summary**

Chapter Six presented a summary of the empirical findings and conclusions drawn from them. Recommendations for an effective library and information service that tailors its services to meeting the needs of local government managers, as well as recommendations for further research, were made. The purpose of the study was to investigate the information behaviour of managers in the Msunduzi Municipality's business units, in order to adapt or design and deliver an information service that would be effective for the achievement of managers' job objectives. The following research questions guided the study: what are the information needs of managers?; how do managers meet these needs?; what are the information source preferences of managers?; what are the barriers experienced by managers during information seeking? As reflected in the findings of the analysis of the data collected for the study, these research questions did provide some insight into managers' information behaviour. It can therefore be concluded that the purpose of the study was achieved.

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## APPENDICES

### APPENDIX 1: Permission to conduct research in the Msunduzi Municipality

<b>The Msunduzi Municipality</b>		
Private Bag X 321 Pietermaritzburg 3200 ☎ (033) 392 3000	333 Church Street Pietermaritzburg 3200 <a href="http://www.msunduzi.gov.za">www.msunduzi.gov.za</a>	
<hr/>		
Enq: M. Jackson-Plaatjies    Tel: 033-392029    E-mail: <a href="mailto:madeleine.jackson@msunduzi.gov.za">madeleine.jackson@msunduzi.gov.za</a>		
<hr/>		
Ms K. Naidoo Community Services		23 May 2013
Dear Ms Naidoo		
<b>RE : INFORMATION STUDIES : MASTERS DEGREE</b>		
Your email sent on 16 <sup>th</sup> May 2013 has reference.		
Please be advised that you hereby granted permission to conduct your research within Msunduzi Municipality.		
I trust the above is in order.		
Yours sincerely		
		
<b>M. NKOSI</b> <b>MUNICIPAL MANAGER</b>		
<hr/>		
Telephone/Angqo: 033 3922002 Facsimile/Faxisi: 033 39247309	<b>OFFICE OF THE MUNICIPAL MANAGER</b>	Private Bag / Isikhwama: X321 Pietermaritzburg/Pietermaritzburg 3201

## APPENDIX 2: Participants covering letter & informed consent form

08 May 2013

Dear Participant

**Research Project: The information Behaviour of Managers' in the Msunduzi Municipality's Business Units**

I would like to invite you to participate in this research project which I am conducting as one of the requirements for the Information Studies Masters Programme in which I am enrolled at the Pietermaritzburg campus of the University of KwaZulu-Natal.

The research requires level four managers in the Msunduzi Municipality to complete an online questionnaire sent via e-mail. Conducting a study of manager's information behaviour will lead to a better understanding of their information needs, information seeking behaviour and information use. The outcomes of the project should have implications for the adaptation of the library's existing services or the design of new services that will be effective for the achievement of the managers' job objectives, the most important being service delivery of excellence to the inhabitants of the Msunduzi Municipality.

In compliance with the UKZN ethical regulations, I wish to emphasise that your participation in this project is entirely voluntary and you may decline to participate and may withdraw at any point should you so desire. The information furnished would be treated with confidentiality. I appreciate the time and effort it would take to participate in this study.

Yours faithfully

K. Naidoo

Tel: 033-3922650

E-mail: [kammy.naidoo@msunduzi.gov.za](mailto:kammy.naidoo@msunduzi.gov.za)

Supervisor: Dr Z. Nsibirwa

Tel: 033-2605685

E-mail: [NsibirwaZ@ukzn.ac.za](mailto:NsibirwaZ@ukzn.ac.za)

Miss P. Ximba

Humanities Research Office: Ethics

Tel: 031 – 2603587

E-mail: [XimbaP@ukzn.ac.za](mailto:XimbaP@ukzn.ac.za)

INFORMED CONSENT FORM

**Title of study:**

The information behaviour of managers' in the Msunduzi Municipality's business units

I, ....., hereby consent to participate in the study as outlined in the document about the study.

I acknowledge that I have been informed about why the questionnaire is being administered to me. I am aware that participation in the study is voluntary and I may refuse to participate or withdraw from the study at any stage and for any reason without any form of disadvantage.

I, ....., acknowledge that I understand the contents of this form and freely consent to participating in the study.

**Participant**

Signed: .....

Date:.....

**Researcher**

Signed: .....

Date: .....

## APPENDIX 3: Data collection instrument: self-administered questionnaire.

### Questionnaire: Managers of the Msunduzi Municipality

I am conducting a research project as one of the requirements for the Information Studies Masters Programme in which I am enrolled at the Pietermaritzburg campus of the University of KwaZulu Natal. The purpose of my research is to investigate the information behaviour of managers (specifically level four managers) in the Msunduzi Municipality. Conducting a study of manager's information behaviour will lead to a better understanding of their information needs, information seeking behaviour and information source preferences. The outcomes of the project should have implications for the adaptation of the library's existing services or the design of new services that will be effective for the achievement of the managers' job objectives.

I appreciate the time taken to answer the following questions and assure you that your answers will be kept confidential.

#### Instructions for completing the questionnaire:

Please place a cross(X) in the appropriate box provided by clicking on the box and where required to specify, please use the space provided.

#### Section 1: Demographic Information

1.1 Name: \_\_\_\_\_

1.2 Name of business unit and section: \_\_\_\_\_

1.3 Gender

Male  Female

1.4 Age group

Below 30   
30-35   
36-40   
41-50   
51-60   
61+

1.5 Highest education level attained:

Postgraduate degree	<input type="checkbox"/>
Undergraduate degree	<input type="checkbox"/>
Diploma or tertiary certificate	<input type="checkbox"/>
Completed secondary school education	<input type="checkbox"/>
Incomplete secondary school education	<input type="checkbox"/>

1.6 How many years have you held this position in local government?

\_\_\_\_\_

## Section 2: Information needs

2.1 Information needs refer to the purposes for which information is required. Please indicate the purpose(s) for which and how often you require information?

Information needed for	Always	Often	Sometimes	Rarely	Never
Decision making (e.g. agenda setting: goals, strategies, plans etc.)					
Keeping abreast of new developments in your field					
Solving problems (e.g. public grievances)					
Personnel purposes (e.g. training and motivating staff)					
Network building of contacts (i.e. names & addresses)					
Legal information e.g. acts of parliament					
Research in your field					
Broadening knowledge					
Current affairs					
Other – Please specify:					

**Section 3: Information seeking behaviour**

3.1 Approximately how many hours a week do you spend gathering written and/or verbal work-related information?

Less than 5 hours per week

5 – 10 hours per week

More than 10 hours per week

3.2 Managers have busy work schedules and often do not have the time to search for information themselves. They make use of an intermediary, who may be their personal assistant, a colleague, librarian or a subordinate. Do you use an intermediary to search for you?

YES

NO

3.3 If yes, please specify the kind of intermediary you use

\_\_\_\_\_

3.4 If yes to 3.2 how often do you use an intermediary?

Always	Often	Sometimes	Rarely	Never

3.5 For gathering information do you visit a library?

YES

NO

3.6 If yes to 3.5 above, please select all applicable options

Library	Always	Often	Sometimes	Rarely	Never
Public					
Academic					
Special					
Own departmental library					
Other, please specify					

3.7 If no to 3.5 above, how do you go about gathering the information?

\_\_\_\_\_

3.8 Please indicate your degree of interest in any new information within the municipality, even if it does not directly pertain to you area of responsibility?

Very interested	Moderately interested	Neutral	Slightly interested	Not at all interested

3.9 Which sources do you consult when gathering information? Please place an 'X' (one for each row).

<b>Source</b>	<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
Textbooks					
Printed journals					
Online journals					
Printed newspapers					
Online newspapers					
Printed government documents					
Online government documents					
Internet					
Personal contacts					
Subordinate managers					
Colleagues					
Other, please specify __					

3.10 There are certain factors that influence the selection of the information sources above. These are: ease of use, reliability, accessibility, relevancy and prior experience. **How would you rank these factors in terms of how influential they are?** Please place an 'X' (one for each row).

Factor	Extremely influential	Very influential	Somewhat influential	Slightly influential	Not at all influential
Ease of use					
Reliability					
Accessibility					
Relevancy					
Prior experience					
Other, please specify					

3.11 Are you aware of the following local public library's services? YES NO

Provision of all <b>South African</b> published books, journals, newspapers, government publications, and maps for reference purposes	<input type="checkbox"/>	<input type="checkbox"/>
Inter-Library Loans	<input type="checkbox"/>	<input type="checkbox"/>
Literature searches	<input type="checkbox"/>	<input type="checkbox"/>
Internet services	<input type="checkbox"/>	<input type="checkbox"/>

3.12 Please rank the barriers experienced (if any) in seeking information

Barriers	High	Medium	Low
Lack of time			
Lack of access			
Inadequate resources			
Lack of skills in using library resources			
Lack of knowledge of information sources			
Language			
Other, please specify			

3.13 Do you have any concerns or comments?

---

**Thank You for your time and cooperation!**