Factors that influence

effective knowledge sharing between experts and novices in a South African financial services organisation

Masters in Information Science (MIS) Dissertation

 $\mathbf{B}\mathbf{y}$

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Declaration

I declare that the dissertation: Factors that influence effective knowledge sharing between

experts and novices in a South African financial services organisation, which I hereby

submit for the degree **Master of Information Science** at the University of Pretoria, is my own

work and has not previously been submitted by me for a degree at this or any other tertiary

institution.

The author, whose name appears on the title page of this dissertation, obtained the applicable

research ethics approval to conduct the research described in this work. The author declares

that he has observed the ethical standards required in terms of the University of Pretoria's Code

of Ethics for researchers and the policy guidelines for responsible research.

Signature: OA

Date: 31 October 2018

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Abstract

In the knowledge economy, organisations rely on knowledge to improve and stay competitive in the industry. Knowledge exists both explicitly and tacitly and the challenge lies in transferring the tacit knowledge from expert employees to less experienced or newly employed employees before they leave the organisation.

This study is based on qualitative research, which seeks to determine how knowledge is shared between novices or newly employee employees and experts in a financial services organisation. This study aims to find out how employees share knowledge currently, which includes the tools and methods that they use. In addition, this study aims to discover more effective knowledge sharing tools, methods and activities that can be used to share and transfer knowledge between experts and novices in the organisation.

The main research question is: How could the knowledge transfer between experienced employees and new hires be improved at a financial services organisation?

The research question is answered through the distribution of questionnaires to respondents and interviews conducted. The data collection was conducted based on an exploratory research design and descriptive research method. The data analysis followed an inductive approach. Quantitative analysis using tabulations and graphs and qualitative analysis by means of themes were used to analyse the data collected from the questionnaires and interviews.

The responses that were gathered from the questionnaire and interviews reveal that most employees are not aware of knowledge sharing or knowledge management (KM) strategies. Furthermore, the knowledge sharing tools are not managed effectively.

The results of the study reveal that knowledge sharing as a culture is not driven organisation-wide and knowledge is shared based on the preference and discretion of the employees or teams. There are silos of cultures in the organisation and there is no shared vision or KM or sharing strategy that is guiding employees' behaviour.

Based on the study, an organisation-wide KM and knowledge sharing strategy is essential. In addition, organisations should enable employees to share by providing more capacity dedicated to knowledge sharing and transfer.

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List of abbreviations

Company X – The financial services organisation (bank) that will be involved in the study

 $KM-Knowledge\ Management$

KPI – Key Performance Indicators

CoP – Communities of Practice

SWOT – Strength, Weaknesses, Opportunities and Threats

AI – Artificial Intelligence

VoIP – Voice over Internet Protocol

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Chapter 1: Introduction

1.1. Introduction

Various researchers such as Kannan (2011:489) and Palanisamy (2013:22) define experts as people who have gained vast experience in their professions. Either they had been employed in an organisation or had been working in a specific profession for many years, in which they had accumulated a vast amount of experience and skills.

Uhlenbrook and de Jong (2012:3478) describe two types of experts as professionals which are either I-shaped or T-shaped. I-shaped people have a deeper knowledge and understanding of a specific discipline and these people are experts in that field. On the other hand, T-shaped people are professionals who are able to apply their knowledge across different fields and situations and apply creative thinking to decision making and overcoming challenges. Kos (2018) says that I-shaped people are people with business skills who specialise in areas such as advertising and commerce; engineering skills who specialise in areas of information technology; creative skills who specialise in areas that focus on innovation and entrepreneurship; and demonstrative business such as performers and entertainers.

T-summit (2017) describes I-shaped people as people with deep knowledge in a specific discipline. In addition to the above skills, T-shaped people also have knowledge and insight of systems, an ability to adapt and function as inventors of new knowledge and cross limitations that exist between disciplines.

Goodwyn (2017:3-4) mentions that experts are not necessarily defined by their years of experience, or through repetitive practice but by purposeful training, observation and practice of a specific skill.

On the other hand, novices are defined by Kannan (2011:490) as people who are learning continuously but do not have experience that would qualify them as experts.

Modern organisations spend large portions of their revenue on developing their employees through various learning programmes. The value of this investment can be determined by the quality of their output and the success of the organisation (Argote & Miron-Spektor,

2011:5). Effective and efficient knowledge transfer has the ability to bridge the knowledge gap between experts and other employees in an organisation (OHCHR, 2011).

Smith (2001:311) states that the flow of tacit knowledge amongst employees is crucial to the productivity of the organisation as a whole. Janus (2016:4) adds by stating that a successful organisation shares knowledge about how to operate efficiently and effectively in the organisation so that employees can grow and share knowledge on a regular basis. In addition, there are a few factors that can either hinder or foster effective knowledge sharing among employees such as the culture and structure of the organisation (Jeenger & Kant, 2013:3). With these barriers to knowledge sharing, the challenge lies in finding the most effective knowledge sharing process between employees of different experience levels as well as finding the best culture and environment that will guide the employees in sharing and transferring their knowledge in the best possible way.

The need to find the best process and culture to facilitate effective knowledge sharing leads to the purpose of this study, which is to explore the culture and structure of organisations in order to understand the current knowledge sharing and transfer process between employees in organisations and discover the most suitable knowledge sharing method or practice that is relevant to the organisation being studied.

1.2. Purpose of the study

In keeping with the traditional view of an expert i.e.: more experienced individuals (Kannan, 2011:489; Palanisamy, 2013:22) as the focus of knowledge sharing, this study focuses on the learning processes of employees in an organisation and the process of knowledge transfer of experts to those less experienced, in an organisation.

The aim is to determine the way in which knowledge can be extracted from experts in an organisation and preserved for newly appointed employees or novices that are learning in the organisation. This includes finding existing mechanisms that are used to share knowledge in an organisation, to determine their effectiveness as well as barriers to knowledge sharing and propose a solution for better mechanisms, if need be.

In addition, this study aims to determine how the management of knowledge will aid the efficiency of knowledge sharing and diffusion in the organisation and increase the competitive advantage of the organisation.

1.3. Background of the study

Knowledge is an important tool in society. Lankesar (2014:1) mentions that there are two dimensions of knowledge, namely tacit knowledge and explicit knowledge. Tacit knowledge is defined as knowledge that exists in the human mind and is difficult to express. Explicit knowledge is knowledge that is easily collected for reuse amongst employees in an organisation (Lankesar, 2014:1).

Bratianu and Orzea (2014:42) and Mamabolo (2014:8) compare the tacit part of knowledge to the part of an iceberg that is under water and the explicit part of knowledge to the part that can be observed by people. One can deduce that tacit knowledge is hidden from others and is not easily accessible by others unless the owner shares that knowledge. On the other hand, explicit knowledge can be seen by others in the form of documents, artefacts or any other physical representation of knowledge. This emphasises the power that a person holds in their decision to either communicate or document their tacit knowledge, or withhold it from others (Ling, 2011:328).

As mentioned by Ling (2011:328), we are no longer in the business economy but in an evolving knowledge economy. This knowledge economy emphasises the value that humans have and the role they play in creating and sharing knowledge (Ling, 2011:328). Mamabolo (2014:13) mentions that in the knowledge economy, in order for organisations to succeed and achieve a competitive advantage, the organisation needs to manage their knowledge. It is important that knowledge is effectively managed so that the organisation's innovation and competitive advantage will be easier to achieve (North, Reinhardt & Schmidt, 2002:8).

Smith (2001:311) says that there are many sources of information available; the challenge lies in choosing the correct information and transforming it into valuable knowledge. Smith (2001:312) continues further to say that the trade, flow and application of knowledge become easier when the knowledge is obtained and applied correctly. Smith (2001:311) mentions that employees may fall behind or struggle with their jobs if they are unable to gain or assimilate knowledge due to various reasons, such as lack of training, inadequate management or ineffective training methods (Lee, 2012:7).

In addition, if the organisation's succession plan and knowledge retention methods are ineffective, the knowledgeable employees will not transfer their knowledge and in some cases, experts leave an organisation without leaving an able employee to continue in their stead (Smith, 2001:311; Peña, 2014).

Every stage in the process of knowledge management (KM) will be at risk if organisations do not identify, sustain and adequately reward the influence, flow and use of knowledge. A supportive environment and reliable technology will support the process (Smith, 2001:312). Janus (2016) mentions that the right knowledge that is available in the right place and accessible at the right time is vital to overcoming barriers and enhancing decision making within an organisation.

The knowledge market or economy is very unpredictable and with new and evolving technology, there is an increase in fluctuation and uncertainty in the business environment. With the constant automation of various business processes across all industries, organisations go through various changes. These changes include the expectation of employees to function across various divisions and units irrespective of the field that they specialise in. Employees are now faced with the challenge of being cross-functional in order to stay relevant. This poses a challenge for organisations to have an effective knowledge sharing process that will allow employees to seamlessly contribute to the success of the organisation (Jeenger & Kant, 2013:3).

This research aims at identifying and exploring the knowledge sharing activities of employees at a financial services organisation. This includes understanding the KM practices and knowledge sharing culture as well as the tools and methods used to up-skill employees in the financial services organisation. In addition, the aim is to identify the knowledge sharing and retention process between experts and novices or newly employed employees in the organisation

1.4. Research objectives

- To understand the KM structure of Company X.
- To understand existing methods of knowledge sharing between employees.
- To understand the causes of knowledge hoarding of employees.
- To understand the mechanisms that can be used to share knowledge more effectively.

1.5. Research question and sub-questions

1.5.1. Main research question

How could the knowledge transfer between experienced employees and new hires be improved at a financial services organisation?

1.5.2. Research sub-questions

Sub-question 1

In what way does the existing culture of Company X hinder or encourage effective knowledge sharing?

Sub-question 2

What is the most effective or preferred knowledge sharing method and tool that will improve employee growth, innovation and knowledge sharing between employees with different levels of expertise?

Sub-question 3

What is the process of knowledge sharing between employees of different level of expertise throughout the employment cycle?

1.6. Value of the research

The value of this research lies in that it is an analysis of the current knowledge sharing process within an organisation and whether this process is conducive to enabling newly employed employees to seamlessly fit in and effectively contribute to the knowledge within the organisation. This research contributes to the field of KM in that it highlights the need for effective knowledge sharing processes that are inclusive of all employees in an organisation.

There are existing research studies about knowledge sharing but this research contributes to the academic field because it highlights the knowledge gap that exists in organisational knowledge sharing between experienced employees and novices or newly employed employees. This research adds to the awareness of the challenges of sharing knowledge in organisations as well as the implications of not sharing knowledge. While there are a few limitations of this study, such as investigating only one organisation out of many, this study opens a way for a broader scope of study in future.

1.7. Research design and methodology

This section includes a discussion of the chosen research philosophy, design, approach, strategy, the tools and the methods that were used to collect data, as well as the target audience that was selected.

1.7.1. Research design

This study used a qualitative research approach. A qualitative research approach is appropriate for research questions that can evolve and are broad and the participants generally comprise a lesser amount of people that are not necessarily illustrative of the entire population (Patton, 1990:169; Castellan, 2010:7). Johnson and Onwuegbuzie (2004:20) mention further that the need for a qualitative approach might arise when the data collected is too intangible and broad and there is a need for more practical and real-world information.

Oppong (2013:202) states that in qualitative research, the researcher will not be able to study all aspects of the phenomenon due to cost or other constraints which would, therefore, limit the research to the chosen study. Harwell (2011:149) adds to the aforementioned by stating that the data collection process of qualitative research is subjective, as the investigator researches according to their outlook, capabilities and preferences.

The research philosophy that was selected for this study is the realism paradigm. The realism paradigm holds the claim that reality exists outside human intervention and humans can interpret reality after observation (Ormstom *et al.*, 2014:21; Eriksson & Kovalainen, 2016:20).

An exploratory research design was used in this study. This research design is used when the subject of the research is not clear and more knowledge is required about the subject. In addition, this research design allows for a comprehensive and impartial study (Onions, 2012:79). The research design is appropriate for this study as this study seeks to explore knowledge sharing between employees of different experience levels.

A descriptive research method was used in this study. This method is used when facts and events are described without adding or removing any part of the facts and events. The aim of this research method is to describe the event without any interference from the researcher (Kothari, 2004:3).

Surveys were chosen as the data collection instrument which included:

- Semi-structured face-to-face interviews.
- Questionnaires.

The face-to-face semi-structured interviews were conducted with different employees. A copy of the questions was provided to the interviewee at the beginning of the interview. The questions for both questionnaires and interviews focused on exploring how the culture of the organisation fosters KM, sharing and transfer as well as how employees of different experience levels work together. The questions also focused on methods used to share knowledge in the organisation as well as employees' preference for learning to further their skills and development.

Copies of the questionnaire were distributed to participants through email and on paper. The employees that took part in the face-to-face interviews were different from the employees that completed the questionnaire. The target number for this research was 40 employees, but fewer employees responded as targeted. Questionnaires were completed by 16 employees and 13 employees were interviewed.

The reason for the use of both questionnaires and face-to-face interviews is because the questionnaire can deal with closed-ended and straight-forward questions that have no need for further explanation. The interview, however, deals with questions that can be discussed and combined with other questions, as well as questions that can be elaborated and explained (Harris & Brown, 2010:1).

Collected data was collected to using both qualitative and quantitative analysis. Quantitative analysis was used to analyse the data from the questionnaires and qualitative analysis was used to analyse data from the interviews. This study followed an inductive approach which involves collecting data, analysing the data then forming a theory based on the findings of the analysis (Saunders *et al.*, 2012:128)

1.7.2. Sampling method

Onwuegbuzie and Leech (2007:245) state that stratified purposive sampling is one of the sampling methods that are appropriate for cases where there are smaller groups of participants. The purpose of stratified purposive sampling is to depict the main differences in a phenomenon. In addition, it aids the investigation of diverse styles of carrying out a specific idea or an approach to gaining knowledge (Suri, 2011:70). Tipton (2012:4) agrees

with the aforementioned by saying that in stratified sampling, the population is categorised only on a few variables that are similar and definite in nature. The approach mentioned above was used to determine the sample size, which was chosen based on certain characteristics such as being permanently or temporarily employed by the organisation.

The target population consisted of employees in a financial services organisation. The employees were from different departments in the chosen organisation. Examples are: employees from the Retail and Business Banking Technology; Technology Risk; Digital; Early Careers; and Finance department.

The employees were selected due to the explorative nature of the study, to discover whether there is effective knowledge sharing in the organisation. Due to the exploratory nature of this study, the requirements for selecting the participants was not specific to any pre-existing assumptions, the strata only included employees in different department as the first layer and employees that are temporary and permanent as the second layer.

The temporary employees included in the study are long-standing employees within the organisation. They are employes through the use of 'renewable' contracts and have been employed within the organisation for a period ranging between 3 months and 2 years.

For the questionnaire, there were three temporary employees and 13 permanent employees. The sample consisted of newly employed employees as well as employees that have many years of experience in the organisation. Ten people had been employed between one month and two years and six people had been employed between three and 10 years.

For the interview, there was one temporary employee and 12 permanent employees. Ten people had been employed between one month and two years and three people had been employed between three and 10 years.

The sample represented people with different levels of experience so that the collected data from the participants' responses would incorporate different perspectives.

1.8. The scope of the study

The scope of this study includes exploring how some employees of different experience levels in one financial services organisation in South Africa share and transfer knowledge, which includes understanding how the culture of the organisation fosters or hinders the knowledge sharing process. The scope also includes understanding which methods and tools are used to share knowledge in the financial services organisation.

1.9. Limitations

This study only included participants from one financial services organisation and sampling of employees from pre-selected departments in the chosen organisation; therefore, not all the employees from every department within the company were chosen as participants. This means that the discussion of the data collected was limited to the perspectives of those employees.

The sampling method used to select participants is stratified purposive sampling. This method limits the representation of the entire population as the participants are chosen based on their characteristics. In addition, the analysis of the collected data is based on the perception of the researcher.

The literature review only mentioned some of the tools and methods used to share knowledge, not all the tools and methods were mentioned and discussed. In addition, learning in an organisation was discussed from the perspective of an individual learning in an organisation in order to excel and develop his/her skills and expertise. However, learning in an organisation as a whole was not included in the scope of this study. This could be a limitation because exploring the learning of an organisation can also be helpful in understanding the culture of sharing and transferring knowledge in the organisation.

1.10. Outline of chapters

Chapter 1 includes the background of the research and a brief explanation of each topic. The research purpose was identified and the research questions, as well as the sub-questions were stated. The objectives of the research were clearly defined and the justification for doing the research as well as the scope and target audience of the research were also included.

Chapter 2 includes the literature review of the study. This involves the explanation of each topic from the perspective of different authors. The structures and cultures that influence the learning of employees; the existing methods used for learning and knowledge sharing in organisations; the concept of organisational learning, definition and differences between experts and new joiners; as well as the method of knowledge preservation and transfer in

organisations were discussed. This chapter also includes a discussion of the concepts of knowledge sharing and knowledge hoarding, the benefits and limitations thereof as well as the impact on employees and organisations.

Chapter 3 is the research methodology of this study. This chapter includes the philosophical assumptions that were identified for this study; the definition and discussion of the research design; the description of the tools and methods that were used for data collection; the target audience; the sample method; the research process; the validity and reliability of data; the analysis of the collected data; ethical considerations and research limitations.

Chapter 4 presents the empirical findings. This includes the analysis of data captured from the interviews and questionnaires that were distributed as well as how the result of the analysis link to the research questions and objectives.

Chapter 5 comprises the summary of the research study by highlighting the main points in the research such as the research objectives, questions, methods and analysis. This chapter also includes the evaluation and measurement of the collected data against the discoveries found in the literature. In addition, the conclusion to the study, recommendations based on the findings, as well as recommendations for future research that can be carried out by experts on organisational learning and KM are discussed.

Chapter 2 – Literature Review

2.1. Introduction

There are various knowledge sharing methods that exist within an organisation. These methods are often effective when employees are keen on sharing the knowledge that they possess (OHCHR, 2011). These methods can also prove futile where employees are not open to sharing their knowledge and they practice knowledge hoarding (Jain, 2012:750).

Organisations that place a high value on the learning that their employees partake in are able to break down knowledge hoarding practices and create an organisational culture that encourages knowledge sharing. Employees in such organisations are able to understand the value of the knowledge that they possess as well as the value that lies in sharing their knowledge with their peers (Lee *et al.*, 2012:6; Bordeianu, 2015:147).

Organisational culture has a great impact on the success of knowledge sharing within an organisation. Organisations that place emphasis on having an inclusive organisational culture where employees are encouraged to interact and collaborate with each other are more likely to have effective knowledge sharing methods. Employees in these environments are open to sharing their experiences and knowledge in both formal and informal platforms (Lee *et al.*, 2012:6; Stylianou & Savva, 2016:1516).

This chapter aims to identify and discuss factors that influence effective KM and knowledge sharing; existing knowledge sharing methods and tools as well as generational differences and similarities of employees that influence learning and knowledge sharing in organisations.

2.2. Various definitions of knowledge

This section looks at the various academic definitions of knowledge with the aim of determining a working definition that will be used for the purpose of this research.

Knowledge is an important phenomenon that can be viewed and understood from different perspectives and contexts. The value of knowledge found in one instance can be seen as useless in another instance (Zins, 2007:481). Employees' knowledge in an organisation is valuable in that their learning process and their ability to apply their creativity and knowledge can influence the organisation's productivity positively or negatively. It is very

important to make sure that knowledge is created, stored and shared effectively (Smith, 2001:311).

King (2009:3) defines knowledge as a rationalised, warranted, accurate and individual belief. This definition implies that what is considered knowledge varies from person-to-person as individual experiences and personal beliefs influence what is considered valuable knowledge. Knowledge is often defined and interpreted based on the context in which it exists as well as the purpose of the individuals involved (Zins, 2007:481).

Knowledge is defined by Smith (2001:312) as a human, highly subjective advantage or possession that symbolises the joint abilities and efforts of partnerships and relationships between people. This definition implies that knowledge is unique to each individual and is created and built-upon through interaction with peers. Smith (2001:311) mentions further that organisations rely on the knowledge that is embedded in it for it to succeed in achieving its goals. This knowledge is created, stored and shared by the employees within an organisation (Smith, 2001:311).

Knowledge is described by Demir *et al.* (2015:326) as innovation that is obtained by reasoning, evaluating, rationalising, interpreting, observing, and analysing something. This definition implies that there is a complex process involved in the creation of knowledge.

Knowledge can be defined as a mutual understanding by a group of people, which might become the norm or standard based on tacit or explicit evidence that is recorded either by an individual or by the group (Buckland, 1991, cited in Zins, 2007:481).

One can deduce from the aforementioned that knowledge is an idea that is factual and substantiated to an individual based on their understanding. The aforementioned also indicates that once knowledge of a process has been agreed-upon between individuals that it will become the recorded and accepted procedure for completing that task.

Knowledge can also be a source of conflict, because one's knowledge of something can be averse to another's knowledge of the same thing. Therefore, knowledge is also based on one's perception of information (Zins, 2007:481).

Information is defined as facts, ideas and messages with relevance and meaning (Khodorovskii, 2014:51). Du Rietz (2018:602) mentions that information can be used to negate or invalidate the information of others or disrupt previously attained knowledge. For example, if a company policy has been amended, the new version will disprove the previous version of the policy.

Aktharsha (2011:104) states that "there is no knowledge without someone knowing it". In essence, knowledge cannot be saved in machines because knowledge only exists in the human mind but it can be embodied and implanted in processes, systems and procedures. Omotayo (2015:4) agrees with the aforementioned by stating that people are the foundation of knowledge. People possess the skills that enable them to think imaginatively and uniquely and create knowledge through their experiences and expertise.

Knowledge can be defined as a mutual understanding by a group of people, which might become the norm or standard based on tacit or explicit evidence that is recorded either by an individual or by the group

The working definition of knowledge for this research will be the definition of knowledge from the perspective of Buckland (1991, cited in Zins, 2007:481). The definition is appropriate for this study because knowledge is described from the perspective of a common or shared understanding that can be created either explicitly or tacitly by a group of people. This study will identify the best methods and processes to share knowledge more effectively in a financial services organisation.

The aforementioned working definition of knowledge is dependent on the use thereof to define KM within an organisation as well as its associated processes.

2.3. Knowledge management

Stylianou and Savva (2016:1515) define KM as the process of gathering, storing, sorting and structuring valuable knowledge with the goal of making it readily accessible to people and systems. Stylianou and Savva (2016:1515) continue by saying that the valuable knowledge resides within experts in an organisation as well as in catalogues, systems and other accessible resources.

KM is a process where organisations make an effort to obtain explicit and tacit knowledge from their employees to aid in the creation and sharing of new knowledge (Lankesar, 2014:1).

Based on the aforementioned definitions of KM, it can be deduced that the aim of KM is to make the knowledge that exists within the organisation available to all of its employees. In doing this, existing processes can be improved as well as new knowledge being created to improve how tasks are completed.

King (2009:4) describes KM as the arrangement, organisation and stimulation of people, practices and procedures in an organisation to ensure that the knowledge resources are enhanced and effectively utilised.

Omotayo (2015:4) mentions that people are the foundation of knowledge as knowledge exists, is constructed and is utilised by people, thus people should be considered when planning for effective KM. Dannemann (2011) expands on this idea by saying that the purpose of KM is to aid and inspire a conversation between people about their skills and capabilities that are related to individuals, procedures and expertise.

Based on these definitions KM can be used to start discussions between people in order to foster the creation and sharing of knowledge. It can also be used to determine the extent to which knowledge resources are used as well as the effectiveness of existing knowledge sharing processes.

Straits Knowledge (2008) describes KM as having the right competencies, in the right instance, in order to enable the right form of knowledge sharing.

We can deduce from the aforementioned that KM can be regarded as the process whereby knowledge is gathered from various sources, be they experts and those with experience, or even other sources such as literature, policies and procedures, with the eye on transferring this knowledge to an organisation and its employees.

Where implemented effectively, KM presents organisations with a wide range of benefits. These allow for the organisation ensure that knowledge processes are engrained in various business processes throughout the organisation which leads to greater knowledge sharing.

2.3.1. Benefits of KM

The need for KM may occur in any organisation where there is a need to organise the organisation's knowledge in order to bring out the most value for competitive advantage over other organisations (Van Zolingen, Streumer & Stooker, 2001:168). Dove (1999) mentions that there is a vast amount of knowledge that is processed in an organisation, therefore, it is important to have an effective KM system or process as this will influence the decision making efficiency in the organisation. Stylianou and Savva (2016:1516) mention that a sociable and empowering environment and culture will enable successful KM in an organisation.

King (2009:6) explains that KM enhances organisational processes such as the creation of new ideas, decisions made in collaboration instead of in isolation or hierarchy as well as individual and group learning. In turn, the organisation's performance improves, services rendered and new products are more suited to the customers and the relationships with customers also improve.

Ling (2011:328) states that organisations that use correct KM strategies will save time and money because KM removes the need to recreate existing knowledge. North, Reinhardt and Schmidt (2002:6) concur with Ling (2011) by stating that there will be an increase in revenue and a reduction in expenses used for administrative work because the organisation can save the time and money of reinventing the wheel; with the right KM tool, risks can be forecasted and managed in a more efficient way.

North, Reinhardt and Schmidt (2002:3) state further that using KM tools will effectively speed up the process that organisations go through to ensure effective task completion which will, in turn, reduce the time spent on monotonous work and decrease duplication of tasks completed by employees.

In addition, Dalkir (2011:25) mentions that KM develops organisational memory, increases the opportunity for employee contribution and innovation and increases employees' contributions, collaboration and participation.

Comprehensive KM platforms allow for the creation and the editing of documents by any member of the organisation. In a fast-paced environment, it is essential for organisations to adapt to new technologies and methods in addressing the needs of their customers (Suri, 2010).

From the aforementioned, one can deduce that KM promotes good decision making, fosters individual and organisational growth and increases innovation and collaboration among employees. In turn, KM tools when used effectively can foster effective knowledge sharing in organisations.

One of the aims of KM is to ensure that knowledge sharing occurs seamlessly throughout an organisation whilst encouraging learning and growth. The ineffective implementation of KM can lead to lack of knowledge sharing which leads to a lack of growth and innovation.

2.3.2. Impact of ineffective KM

Ou and Davison (2007:4) carried out a survey with a few employees in different organisations. Based on the result of the survey, the problems that those employees experienced due to lack of effective KM are divided and explained below according to knowledge creation, storage/retrieval, transfer and application:

• Lack of an effective KM tool affects knowledge creation:

- o The employees are hesitant to impart their knowledge.
- The information or material that is available in the organisation's system is not sufficient to do the work that is required.
- o Processes used to complete tasks are not consistent.

• Lack of an effective KM tool affects knowledge storage/retrieval:

- There is no documented policy of how to do things.
- There is a high rate of employees leaving the organisation and the knowledge is not retained.

If there is no policy that is explicitly available to employees, then delivery of work will be inconsistent due to the lack of standardisation. This means that more time will be wasted on trying to make everyone's work look more unified.

• Lack of an effective KM tool affects knowledge transfer:

- o Communication is not common between subordinates and superordinate.
- The low-level employees do not have adequate information for the tasks they are given.
- o There is no uniform way of doing things.
- o There is out-dated information and no procedure in place to add new information.

• Lack of an effective KM tool affects knowledge application:

 Employees are experiencing difficulty in their ability to ascertain the responsibility of each worker. Low-ranking employees are unable to grasp and relate to the way of doing things in different situations in their working environment.

One can deduce from the aforementioned that the lack of an effective KM tool is detrimental to an organisation as there will be a difficulty to create new and relevant knowledge or share knowledge in the organisation. This might cause the organisation to lag behind in the industry and that could affect the revenue creation as well as customer trust and loyalty.

King, Kruger and Pretorius (2007) say that organisations will benefit in the business world when they are able to tap into and utilise the knowledge that their employees invent and make available for further implementation.

The success of KM is dependent on the culture that exists within the organisation. A culture of sharing and learning is required for employees to openly partake in KM processes. The lack thereof hinders learning, growth and innovation within an organisation.

2.4. Knowledge management culture

Stylianou and Savva (2016:1516) describe a KM culture below that will aid effective learning and growth in an organisation. A good KM culture:

• Promotes knowledge sharing between employees in an organisation.

- Ensures that there is valuable communication between employees.
- Ensures role transparency between employees of different management levels.
- Encourages trust between employees.
- Promotes driven organisational members.
- Supports the learning process of employees in an organisation.
- Ensures that the environment is constructive and positive.

2.5. Organisational culture

Stylianou and Savva (2016:1516) define organisational culture as rules, traditions and principles that are commonly held by the employees. Lee *et al.* (2012:6) state that the culture of an organisation should be motivational and positive so that employees can have confidence in their abilities and effectively carry out tasks assigned to them in their working environment.

Mazin (2010, cited in Lee *et al.*, 2012:6) and Millet (2010, cited in Lee *et al.*, 2012:6) explain that a high level of employee morale will lead to the following:

- Increase in efficiency.
- Improved functionality and resourcefulness.
- Fewer days are taken for leave.
- Great eye for detail.
- A safer environment.
- Improved quality of work.
- Better communication.

Millet (2010, cited in Lee *et al.*, 2012:6) mentions further that in the interest of keeping employee morale high, a good leader should express interest in employees' well-being and development; discover what drives and motivates the employees, offer incentives for good performance and communicate gratitude for the team efforts.

From the aforementioned, one can deduce that in order for an organisation to retain competent and motivated staff, the culture of the organisation has to keep the employee morale high as well as aid the effective productivity of employees without putting their health or livelihood at risk.

The absence of a culture that encourages knowledge sharing invariably leads to employees hoarding their knowledge and not feeding their knowledge into business processes, which opposes the core of KM.

2.6. Knowledge hoarding

Connelly *et al.* (2012:65) state that withholding knowledge in an organisation can be explained in two ways: hoarding knowledge and hiding knowledge. A knowledge hiding situation is where an employee chooses not to share knowledge when asked by another employee; knowledge hoarding is when an employee hides knowledge for self-gain whether anyone asks for it or not (Holten *et al.*, 2016:223). The focus in this study is on knowledge hoarding.

Jain (2012:750) states that knowledge hoarding occurs when employees in an organisation begin to position their needs above the organisation's needs. The employees choose themselves over the organisation, which leads to disharmony and distrust as well as isolation instead of unity.

A culture of knowledge hoarding might develop among employees in a team or group, because of a dispute between employees. For example, an employee might not want to aid the development or growth of another employee thus hoarding knowledge that might help the other employee in achieving their goals. This becomes a problem for the organisation as that particular knowledge that is not shared might be necessary for the organisation to make informed decisions and work effectively (Ling, 2011).

Ling (2011:329) suggests that there should be an assessment of knowledge hoarding/sharing in an organisation among employees to ensure effective flow of knowledge in the organisation and efficiency of tasks completed.

2.6.1. Causes of knowledge hoarding

Jain (2012:752) states that employees might hoard their knowledge because they want to secure their jobs – they might feel threatened by new employees taking over their roles if they have the same knowledge. Employees might keep their knowledge from other

employees because they want to have control over who has access to their knowledge; they fear their knowledge might be misused (Ling, 2011:329).

Marouf (2015:103) mentions that some employees might hoard their knowledge because they believe that sharing knowledge is uncommon and they are hesitant due to the fear of the unknown. Holten *et al.* (2016:223) mention that an intimidating and unhelpful environment over a long period of time can cause employees to hoard knowledge as a means of self-security or for retribution.

Knowledge hoarding has the potential to hinder the learning and growth of employees which translates into the stagnant long-term growth and success of the organisation.

2.6.2. Impact of knowledge hoarding

A culture of knowledge hoarding might build segregation and might cause employees to work in silos instead of as a unit. This might create a chaotic and an unsafe environment for employees to work in (Jain, 2012).

Smith (2001:311) agrees with Jain (2012) and states that new employees might struggle if they are not trained or equipped with the relevant information to do their jobs effectively. This creates confusion on what needs to be done and when the tasks should be completed. These employees might not learn the correct ways of doing things which might cause inconsistencies in the organisation. Furthermore, employees might leave the company due to the frustration of not having in-depth learning or experience of how things are done in their department and the organisation. The employees that leave might also have knowledge, expertise and capabilities that would benefit the organisation, but were unable to share due to lack of recognition of their value (Smith, 2001:311).

This issue of employees leaving organisations might continue if organisations do not acknowledge and recognise the value and resourcefulness of their employees (either new or experienced) or tap into the knowledge that could effectively promote the organisation (Smith, 2001:311). Employers adapting to new ways of working and sharing knowledge could improve the processes, systems and efficiency throughout the organisation as well as improve knowledge transfer between employees (North, Reinhardt & Schmidt, 2002; Jain, 2012:752).

Welch, Ebert and Spreitzer (1998:1) state that knowledgeable people in the organisation are overworked to the point that they experience physical burnout. This might create a cause and effect situation: Employees are over-utilised because very few people are knowledgeable in the specific field and they are unable to share their knowledge because they are over-utilised.

Hansen (2011:74) argues that although knowledge hoarding prevents collaboration and sharing of knowledge, there are a few positive impacts of knowledge hoarding in organisations when considering self-advancement and how the performance of individuals affect the achievement of organisations' objectives.

Husted, *et al.* (2012:756) agree with Hansen's perspective of knowledge hoarding by stating that withholding knowledge has some benefits such as: it can be a safeguard over the organisation's improvement and lead over competition; it guarantees the preservation of the control and authority of the employee/s hoarding knowledge; and ensures safety of individual development of an employee such as receiving monetary incentives, advancements in position as well as security of one's job.

In order to break a culture of knowledge hoarding within an organisation, a culture shift is required where knowledge sharing is encouraged and engrained in culture of the organisation.

2.7. Knowledge sharing

Knowledge sharing is referred to as the shared actions of employees in which they waive their personal pursuits and instead share their knowledge in order to add value to the organisation (Van den Hooff & Van Weenen, 2004:4; Spender & Scherer, 2007:9).

Smith (2001:311-312) states that tacit knowledge is misplaced when companies subcontract, downsize, merge and retrench employees and it is important to ensure that efforts to collect, categorise, convert, document and share knowledge are encouraged otherwise priceless knowledge will be lost.

Jackson *et al.* (2006, cited in Eaves, 2014) define knowledge sharing as a complex, versatile, arbitrated and interactive practise that is controlled and intended but is difficult to define in terms of the classification and extent to which the knowledge is shared.

Knowledge sharing is defined as influential in ensuring an effective management of knowledge and in the improvement of the organisation's business and trade.

Zhang and Jiang (2015:282) mention that there are two ways people can share knowledge which are: responsive and proactive. Responsive knowledge sharing happens when people share knowledge when they are asked to share their knowledge. Proactive knowledge sharing happens when a person takes the initiative of sharing new insights and ideas with the aim of enabling discussions and suggestions from other people. The person sharing the knowledge can choose whom to share this knowledge with, plan the appropriate time and setting to share their knowledge.

Anderson and Hardwick (2017:1184) state that trust plays an important role in fostering knowledge sharing between people and encouraging innovation because people will spend less time in communicating through formalised methods and work more freely together. Anderson and Hardwick (2017:1194) mention further that the first level of trust between people allows them to share knowledge on a transactional level but as the relationship deepens, people share knowledge on a more personal level and people become more reliable because there is a personal interest in sharing and creating new knowledge.

2.7.1. Knowledge sharing culture

Reychav and Weisberg (2009:189) mention that employees who are in a good knowledge sharing environment will most probably be encouraged and motivated to network more and complete tasks more effectively and efficiently. This could lead to an incentive to stay in the organisation due to the employee's contentedness, a positive environment and a drive to expand one's know-how. Leistner (2010:61) agrees by mentioning that the atmosphere and environment of an organisation and amount of trust between employees could either build-up or break down employees' motivation to share knowledge.

Jain (2012:751) continues further to say that individuals do not realise that sharing knowledge adds more value to the individual as well as the organisation, as the knowledge grows and develops into something more substantial and that individual development equals organisational development. In essence, the knowledge that is shared between employees in a collective and united space will increase the versatility of the organisation.

On the other hand, Haas and Hansen (2004:2) contradict the aforementioned by saying that sharing knowledge does not only include advantages but also expenses and difficulties of

acquiring and utilising knowledge across internal organisational borders. Haas and Hansen (2007:1133-1134) continue further to say that since there is no guarantee that increasing knowledge sharing in an organisation will improve the performance of employees, researchers should assess how knowledge assets are used by employees to improve their performance.

The success of knowledge sharing is linked to the learning culture that exists within the organisation. This learning culture is the mechanism by which knowledge sharing occurs.

2.8. Organisational learning and knowledge sharing

Argote and Miron-Spektor (2011:4-5) define organisational learning as a revolution that follows as an organisation obtains experience. The experience can be assessed by the increasing number of tasks completed. Argote and Miron-Spektor (2011:6) add by saying that experience intermingled with perspective produces knowledge. The knowledge is surrounded by many sources such as people, their habits as well as their method of retaining information for later recollection (Argote & Miron-Spektor, 2011:4). This definition of knowledge agrees with the definition by Smith (2001:312) and Buckland (1991, cited in Zins, 2007:481) in that it indicates that knowledge exists due to people sharing their experience and "know-how" with each other.

Argote and Miron-Spektor (2011:5) further mention that organisational learning is not finite but is a progression that happens at different stages or phases. The progression and growth that is gained by the organisation over time can be referred to as an organisational experience.

King (2009:5) mentions that there is a direct relationship between organisational learning and KM in that organisational learning is the target and objective of KM. The use of effective KM will improve the organisation's procedures and traditions which will improve the accomplishment of organisation-wide goals. Bordeianu (2015:147) states that an organisation that is learning has the following characteristics:

- There are opportunities for continuous learning.
- Organisational objectives can be met through the process of learning.
- A link is recognised between individual accomplishment and organisational accomplishment.

• The organisation establishes and supports an environment that allows employees to express their ideas and thoughts.

Kantamara and Ractham (2014) describe organisational learning as single and double loop learning. Single loop learning happens when inaccuracies and problems are detected and rectified and organisations are able to continue with their plans and objectives. The process of solving problems and rectifying inaccuracies enhance the knowledge, experience and capabilities of the organisation without modifying the structural nature of the organisation's behaviours.

Double loop learning happens when errors are discovered and rectified; the organisation examines and adjusts its fundamental norms, processes, rules and goals. This practice involves altering the knowledge, experience and capabilities of the organisation (Kantamara & Ractham, 2014).

The definition of organisational learning described above by Kantamara and Ractham (2014) as single and double loop learning focuses on the overall learning of the organisation when it identifies and fixes errors, problems and inaccuracies once they are discovered. In this study, the focus will be on how employees learn as individuals in an organisation and how knowledge is created in the organisation as a result of the learning. Muzondo and Ondari-Okemwa (2015) state that although the creation of knowledge is vital for the continued existence of an organisation, the values and principles shared by employees are also essential in the meaning they derive from given objectives, as well as the implementation thereof. Organisational learning can be influenced by the culture of an organisation. It is crucial that there is a culture that is unreserved and open so that employees will be comfortable with sharing their knowledge (Jeenger & Kant, 2013:4).

Organisational learning can also be influenced by KM and organisational structures. Al-Ammary (2014:1) says that KM that is allied with business development and information tools will help to constantly attain, preserve and reprocess information as well as to assess tactical knowledge resources in an organisation.

The organisational structure can affect the movement of information in an organisation, employee perspectives, as well as how employees relate to and communicate with each other (Yap *et al.*, 2010).

2.8.1. The influence of organisational structure on organisational learning

Rishipal (2014:56-57) mentioned seven types of organisational structures which are line and line and staff; functional; divisional and market; product and process; project and matrix; bureaucratic; and network or virtual organisational structure.

2.8.1.1. Line, and line and staff organisational structure

This structure is hierarchy-based as authorisations come from top management through to the middle management which then gets filtered down to the low-level employees. The middle management is integrated with the low-level employees and there is less rigidity in communication. However, problem-solving might take longer because there is a need for approval from top management before engaging in work and that might also inhibit innovation.

This structure may hinder organisational learning as it requires approval from top management that is time-consuming and can result in employees being frustrated in their development as well as in the improvement of existing processes. In a fast-paced environment, employees are often faced with a situation where they need to make on-the-spot decisions that can be beneficial to the organisation. This structure does not allow for employees to make such decisions.

2.8.1.2. Functional organisational structure

This structure is based on the expertise of employees, in that employees are grouped together according to their abilities and the tasks assigned to them. The lack of cross-skilled members in a team might cause stagnation and it might mean that employees that are not on the same skill level will not be able to learn from the experts. This structure might enable knowledge hoarding or cause an unhealthy competition between teams instead of focusing on being more efficient for the organisation. It might also inhibit collaboration between teams.

This structure could impact organisational learning as knowledge is stored in silos and employees are not exposed to the bigger picture. In the modern working environment, employees are required to know more about the organisation than what exists within their immediate teams. This structure hinders this as it does not allow employees to interact with their peers in order to expand on their skills and knowledge.

2.8.1.3. Divisional and market organisational structure

This structure involves employees being grouped according to the departments they fall under. The employees are also grouped according to their location. This structure might allow for silos where departments are focused on their personal goals or departmental goals as opposed to the organisational goals.

This structure, like the previous structure, results in the creation of silos where employees are restricted to learning and developing according to the goals of their immediate teams. Employees are not exposed to learning about the greater goals of the organisation and improving on their skills and knowledge accordingly.

2.8.1.4. Product and process organisational structure

This structure is created according to the number of manufactured goods in the organisation. The employees are then divided according to the different merchandises. The process followed in this organisation is based on satisfying the end user. There is a focus on the method of developing products and meeting organisational goals rather than individual or departmental goals.

This structure does not allow for employees to learn and contribute to the goals of the organisation. It does not create an environment where employees can set goals beyond that of the product team that they are in. Once they master their role, the potential for growth decreases.

2.8.1.5. Project and matrix organisational structure

This structure groups employees according to projects that are allocated to each department. There is a chain of command but with fewer ranks from top management that is filtered down. The value of this structure is found when employees are able to carry out their projects more efficiently. Another structure which uses a similar method is a matrix structure which combines employees based on the work they perform and the products they are optimising for.

This structure creates an environment where employees are exposed to more than just their roles. There are more opportunities for learning which enables the department to produce high-quality products. Due to the fewer ranks within the chain of command, employees have more authority and influence on their learning and development.

2.8.1.6. Bureaucratic organisational structure

This structure is based on bureaucracy, in which methods and techniques are very routine based and consistent. There is little or no room for improvement with this structure, employees are not inspired to be creative or innovative. This structure could lead to stagnation of employee development and unhappiness in the work environment.

This structure does not cater for learning and for the development of employees. Employees are stuck in a routine and are not encouraged to contribute to the success of the organisation.

2.8.1.7. Network/Virtual organisational structure

In this structure, organisational leaders uphold and synchronise the relationship with stakeholders, such as clients, retailers and business partners for the success of the organisation. There is continuous communication that takes place electronically which could inhibit face-to-face conversations and could also decrease effective communication. This method could prevent transparency between the different colleagues and decrease customer satisfaction.

This structure limits organisational learning to electronic aids that may not be useful to all employees. Learning is also limited to that which the other person wishes to share. This structure makes it difficult for employees to indicate their need for knowledge and growth.

2.8.2. The influence of organisational culture on knowledge sharing

According to the discussion in 2.8.1. The influence of organisational structure on organisational learning, in a flat organisational structure such as the project and matrix structure, there is open communication between employees of different levels. Therefore, this structure will allow for knowledge sharing because there is no competition between employees, but each person will be working to serve the purpose and goals of the organisation and to satisfy customer needs (Rishipal, 2014:58).

However, knowledge sharing in a hierarchical structure such as *line and line and staff* and *bureaucratic structures*, might be less because the culture might be such that employees feel that they have power over another because of certain knowledge that they possess and might not be encouraged to share. The communication might not be as easy as there is a bureaucracy that might control the knowledge that is shared among employees with little room or flexibility for sharing (Rishipal, 2014:58).

Diefenbach and Sillince (2011:1522) point out that there is always some form of hierarchy in an organisation, but the difference lies in the formal or informal hierarchical structures and cultures. In a formal hierarchical structure, there is an imbalanced interaction between employees and there is little or no transparency between the top management and the lower-ranked employees. This could impede collaboration and flexibility as employees are not encouraged to network with other people in the organisation. In an informal structure, Diefenbach and Sillince (2011:1520) mention that bureaucracy might not necessarily be a knowledge sharing impeding culture, as employees possess the skills and abilities to work in a formal setting but find a way to perform their tasks in an informal way. In essence, employees are able to create an informal culture in a hierarchical structure.

In a tall organisational structure such as Project and Matrix, Functional, Divisional and Market Organisational Structure, knowledge sharing could be encouraged, but there is little or no autonomy and trust that is given to the employees so that they can share freely and sharing could be restricted to a need-to-know basis (Rishipal, 2014:56).

One can deduce from the aforementioned that the structure of an organisation can determine how well employees work together, how they learn and share knowledge with other employees. In addition, Ractham and Chirawattanakij (2016:64) say that people's ethnic culture as well as organisational culture, can affect people's acceptance of knowledge sharing.

The next section will discuss some of the knowledge sharing methods that can be used to overcome some of the negative influences of organisational structure and culture on knowledge sharing. These knowledge sharing methods are required to be either formerly or informally engrained in the learning practices within the organisation.

2.9. Knowledge sharing methods and techniques

Knowledge sharing has an important role to play in the development and growth of employees and organisations. Therefore, choosing the right knowledge sharing methods is essential for an effective knowledge sharing process. Some of the knowledge sharing methods are described below:

2.9.1. Peer assist

Peer assist occurs between employees of the same or of different organisational levels, sharing their experiences and ideas through various means of communication. Employees are able to encourage and inspire other employees through their interactions (Swap, *et al.*, 2001:111).

Peer assist is defined as a method that can either happen face-to-face or electronically where people can share their knowledge with individuals or groups that are seeking knowledge from others to aid their development and assist with present or future challenges (IDB, 2012:2).

OHCHR (2011:54) describes peer assist as a method of sharing capabilities, insight and expertise among peers. This method is designed to create solutions to specific challenging tasks based on the skills and capabilities of the individual or team assisting other individuals or teams. In addition, the process involves a collective discussion and analysis of traditions and methods that work well in order to adopt change to the current situation or way of working.

OHCHR (2011:54) mentions that peer assist can be used:

- To solve problems collectively.
- To integrate knowledgeable peers.
- To address impediments and obstacles.
- To prompt people's opinions and views.
- As a project appraisal and assessment.

2.9.1.1. Benefits of peer assist

IDB (2013:3) mentions a few benefits of peer assist which are:

- It creates an atmosphere where colleagues and associates can willingly share knowledge with each other.
- It can assist employees to detect and alleviate risks and prevent avoidable mistakes during the implementation of tasks.

2.9.1.2. Limitations of peer assist

- Bijami, Kashef and Nejad (2013:94) found that peer assist was often viewed with scepticism because peers tend to assist other peers based on preference.
- Lepper and Stockwell (2014) state that the knowledge shared between peers is subjective because peers are not necessarily professionals.

2.9.2. Storytelling

Storytelling is defined by Marsh (2012:57) as when a skilled and qualified employee consciously engages with other less knowledgeable employees in the form of an organised storyline with the intent of conveying vital information in order to guarantee the effective transmission of significant learning and understanding. The aim of this storytelling would be to ensure that employees are able to recognise related occurrences and results so that they will be guided in making the correct decisions.

Storytelling is described by OHCHR (2011:62) as a process of narrating or describing real experiences, captivating people with lessons learned, reflecting on past experiences, participatory interaction and effective listening.

OHCHR (2011:62) mentions that storytelling can be used:

- To present and explore ideas.
- To increase enthusiasm, engagement and insight.
- To promote respect for difference in principles and beliefs that stem from people's different experiences.
- As an informal team-building method between people who are accustomed to and comfortable with each other.

2.9.2.1. Benefits of storytelling

- Yuksel, Robin and McNeil (2011:1267) mention that storytelling improves the skill of narrating, speaking and listening which improves critical thinking and analysis.
- Barker and Gower (2010:306) mention that storytelling fosters a sensible and shared reasoning and understanding among employees that are part of the storytelling process. This understanding creates a synergy between employees, promotes teamwork and ensures a better understanding of the organisation's culture.

2.9.2.2. Limitations of storytelling

- OHCHR (2011:62) states that storytelling is not fit for everyday situations or tasks that call for objectivity in the reporting stage.
- Yuksel, Robin and McNeil (2011:1268) mention that storytelling only works after a long time has been devoted to the process and the effect of storytelling might be minimal.

2.9.3. Mentoring

Mentoring is used in knowledge sharing where a knowledgeable and experienced employee advises and guides less knowledgeable employees in the organisation (Swap, *et al.*, 2001:108). Kirk (2012:4) says that mentoring helps to assist the process of knowledge sharing and it constructs vital, useful and reverent connections between employees.

Hamburg (2013:220) mentions that mentoring can occur either in a formal, organised and planned setting or in an informal and casual manner. Hamburg (2013:220) explains formal and informal mentoring further below:

Informal mentoring either starts naturally and unprompted or is initiated deliberately by a person who wants a mentor. The characteristics of informal mentoring are described below:

- Goals and aspirations of the mentee are not always entirely stated to the mentor.
- End results of the informal mentoring relationship cannot be determined entirely.
- The value of mentoring to the organisation is indirect because the mentee is the sole focus.
- The mentoring relationship is formed based on the initial interaction and connection between mentor and mentee.

2.9.3.1. Benefits of informal mentoring

Hamburg (2013:220) mentions a few benefits of informal mentoring which are:

- There is shared respect and commitment between the mentor and the mentee.
- The informal process allows the mentee and mentor to choose partners based on the level of compatibility.
- The process is flexible and is based on the mentee and mentor's willingness to work together.

2.9.3.2. Limitations of informal mentoring

Hamburg (2013:220) mentions a few limitations of informal mentoring which are:

- The informal mentoring process is difficult to apply to a group and works better with individuals.
- The lack of a clear vision of the end result might create some tension between the mentor and mentee.

Formal mentoring is usually facilitated and aided by an organisation. The organisation then provides the tools needed by employees for a well-organised and useful mentoring process. The characteristics are described below by Hamburg (2013:220):

- The goal of the mentoring relationship, as well as the knowledge that will be shared, is determined right from the start.
- Results of the mentoring relationship are assessed and calculated.
- The mentoring relationship is initiated by the organisation based on the compatibility of the mentor and mentee.
- The value of formal mentoring is direct to the organisation and employees involved.

2.9.3.3. Benefits of formal mentoring

Hamburg (2013:220) mentions a few benefits of formal mentoring which are:

- There is no exclusivity with the mentoring process; employees are paired with a mentor when they meet the conditions set by the organisation (Hamburg, 2013:220).
- Durham University (2017) mentions that mentoring improves the mentee's selfreliance; encourages introspection and consideration of actions; increases job satisfaction and colleague recognition and improves the mentee's understanding and appreciation of the organisation.

2.9.3.4. Limitations of formal mentoring

Hamburg (2013:220) mentions a few limitations of formal mentoring which are:

- The relationship between the mentor and mentee is not flexible because the nature of the relationship is formal.
- The process is not flexible as it is facilitated by the organisation.

Hamburg (2013:220) says that the success of formal or informal mentoring will be dependent on whether the mentor has the necessary expertise and abilities that match the mentee's needs and whether the culture of the organisation supports knowledge sharing.

Hamburg (2013:220) states that organisations support mentoring because the process improves the productivity of employees.

2.9.4. Coaching

Coaching is defined by Cox, Bachkirova and Clutterbuck (2014:1) as a process of improving human growth by having structured and purposeful interactions with the aim of promoting desirable change for the benefit of the participants being coached.

Macmillan (2011:2) describes coaching as a communication and trust-based process between employees and coach where the coach helps the employee to think of ideas and solutions that will not only aid self-development and growth but also aid team and company-wide development.

McCarthy and Ahrens (2012:9-16) mention that coaching can be used:

- To aid the learning process of a new employee.
- To empower employees to solve problems through the identification of ideas and solutions.
- To increase or improve communication skills of employees.
- To produce real and timely results.

2.9.4.1. Benefits of coaching

Michael (2008:6) mentions a few benefits of coaching which are:

- It can provide the prospect for individual and group attainment of new abilities and promote personal enhancement and growth.
- It can be used to inspire an optimistic outlook towards learning.
- The individual being coached can choose their learning content and context because the learning method is flexible.

2.9.4.2. Limitations of coaching

Michael (2008:6) mentions a few limitations of coaching which are:

- Coaching does not cause change unless well-defined and assessable goals are set before the coaching begins.
- Coaching will not be successful if participants of the coaching are not fully dedicated throughout the course of the coaching.

In an effort to identify the limitations of coaching, a comparison between coaching and mentoring is described below by Hislop, Bosua and Helms (2018:262):

- Coaching is more formal and co-ordinated in that it occurs at a set pre-arranged time
 and has a set duration while mentoring is less structured and can be either formal or
 informal.
- Coaching is focused on developing narrow and particular skills and proficiencies while mentoring is not as focused.

2.9.5. Communities of Practice

Communities of practice (CoP) are a form of gathering of like-minded people with the aim of sharing knowledge and resolving issues. CoPs are important in developing the knowledge market, in the construction of knowledge as well as in the invention of new ideas and tackling corporate tasks while contributing to knowledge sharing (Swap *et al.*, 2001:111; Dolan, 2013:12). This form of gathering can be face-to-face or virtual (Sztangret, 2014:192). Kimble (2006) adds by stating that communities of practice offer a valuable socio-cultural depiction of the conception, design and generation of knowledge that can be harnessed in the corporate environment.

OHCHR (2011:23) mentions that CoPs can be used:

- To discover practices that are significant to employees.
- To inspire professional growth and enhanced learning.
- To enable faster response to stakeholders' needs and queries.
- To discover, record and share best practices.
- To increase collaborative problem-solving.
- To eliminate replication of solutions that already exist.

2.9.5.1. Benefits of communities of practice

Wenger (2011:4) mentions a few benefits of communities of practice which are:

- The communities formed are not limited by prescribed structures, because communities of practice allow people to connect across different locations and organisational boundaries.
- Employees are able to focus on both tacit and explicit aspects of knowledge invention and sharing.
- CoPs empower employees to take responsibility for managing their knowledge.

2.9.5.2. Limitations of communities of practice

- OHCHR (2011:23) mentions that CoPs are steered and guided by willing contributors; therefore, an issue might arise if there are no willing participants to drive the CoPs.
- Allen and Apgar (2007:4) mention that the characteristics that make CoPs successful such as enablement of independence, a lack of formality and crossing boundaries and limitations might be challenging in hierarchical organisational structures.

There are other methods of knowledge sharing that are not described above such as fishbowls, knowledge cafés, innovative brainstorming, knowledge fairs, SWOT analysis, Jigsaw and after action reviews (OHCHR, 2011). From the aforementioned, one can deduce that having various knowledge sharing methods is essential, but the use of the method, as well as the culture and structure of the organisation will determine how effective and efficient employees will be in KM.

The aforementioned methods and techniques require knowledge sharing tools to be effective. These tools promote learning which leads to knowledge sharing and creation.

2.10. Knowledge sharing tools for learning

Sharing and learning can occur in various ways. Liebowitz and Frank (2016:4) describe electronic learning (e-learning) as an electronic tool used to adopt, obtain and share knowledge which promotes the overall learning of employees in an organisation. While elearning is an effective tool for learning, it can also be inert or static on its own but using the tool together with KM will create a dynamic process of knowledge creation, retention and sharing. Goetsch and Davis (2010:8) mention that while online training tools are effective, face-to-face and hands-on-training will be an enhancement to motivate employees and ensure collaboration between employees.

Swap *et al.* (2001:111) explain that different training methods can be used for employees with different levels of expertise. Experts can use models or virtual reality for practical training through Artificial Intelligence (AI). New joiners can be trained through computer schemes and logic which can be explained by employees that have more understanding and

experience in the organisation. Various tools can be used for employees to guide and communicate with each other and share their knowledge. These tools are described below.

2.10.1. Video conferencing

Video conferencing as described by OHCHR (2011:88) is a tool that allows employees in different locations to communicate – see and hear each other in real time. Through the use of video conferencing, employees can attend meetings, workshops and other events virtually. An example of a platform that offers video conferencing is Skype (Denstadli, Julsrud & Hjorthol, 2012:75).

2.10.1.1. How to use video conferencing

OHCHR (2011:88) and Earon (2014:2) state that video conferencing can be used for:

- Reporting and reviews.
- Conferences.
- Training sessions.
- Educational workshops.

2.10.1.2. Benefits of video conferencing

- Earon (2014:1) mentions that video conferencing improves efficiency and organisational competence because it allows for flexibility of communication between employees without having to interact face-to-face.
- Video conferencing allows flexibility in that people can connect in a boardroom that is specifically designed for video conferencing, on computers and also through mobile channels (Denstadli, Julsrud & Hjorthol, 2012:66).
- Denstadli, Julsrud and Hjorthol (2012:79-80) mention further that video conferencing saves time because face-to-face meetings usually take longer.

2.10.1.3. Limitations of video conferencing

- The quality of the video conference can be affected by the strength of the network and internet connection (Lowden & Hostetter, 2012:381).
- In an organisation where employees communicate from different countries and time zones, the conference time is dependent on what time everyone is available (Roy, 2017:84).

2.10.2. Social media

Another instrument of knowledge sharing is communication between employees through social media. There are different examples of types of social media such as: WhatsApp, Facebook, LinkedIn, YouTube, Skype, Twitter and MeetUp (Raghavendra & Jagadish, 2014:152-153; Gaál, *et al.*, 2016).

Social networking sites can be used as a way for employees to express, circulate and review information so that they can collaborate to form new ideas and create new knowledge for the enhancement and development of employees' skills (Sigalaa & Chalkiti, 2015:45).

Some of the social media platforms are defined below:

2.10.2.1. WhatsApp

WhatsApp is an instant messaging application that can be downloaded on mobile phones and can also be accessed on a computer (Ibrahim *et al.*, 2014:3). In addition, to the ability to send text messages, users of WhatsApp can also share images, audio and videos provided the users are connected to the internet (Tiwari & Sharma, 2016:1). Mwape *et al.* (2018:396) mention that WhatsApp can be used as a platform for sharing best practices as well as for sharing motivational information.

2.10.2.2. LinkedIn

LinkedIn is a social networking site available for users to create their profile, which includes updating education and job experience with the aim of sharing information with people, company or groups with the same interests (Chugh, 2017:5). Due to the information available on the site, LinkedIn can be used by recruiters to find candidates for various job roles (Gaál *et al.*, 2015:194).

2.10.2.3. Skype

Skype is an instant messaging application and voice over internet protocol (VoIP) which allows users to communicate with others from all over the world through voice and video calls. This application is available online and can be accessed on mobile phones and computers. Employees can also use this platform for video conferencing (Gaál *et al.*, 2015:194; Chugh, 2017:4).

2.10.2.4. Twitter

Twitter is a platform available for users to send and receive short messages called "Tweets". Twitter also allows posts and transfer of images and videos, as well as hyperlinks of blogs and documents. This platform is available on mobile phones and computers provided that the user is connected to the internet (Raghavendra & Jayashri, 2014:152).

2.10.2.5. Blogs

Blogs, as described by Baxter, Connolly and Stansfield (2010:518) and OHCHR (2011:75), can be used as instruments for knowledge sharing in daily tasks of organisations for delivering reports and keeping internal and external employees, clients and stakeholders informed about activities in the organisation; supplying electronic copies of information created and documented by employees in the organisation and assisting discussion around organisational subjects and issues.

2.10.2.6. Benefits of social media

- Priyono (2016:9) mentions that there is little to no time lag between sending and receiving messages on social media platforms.
- Social media promotes the creation and sharing of knowledge between people and it also strengthens the existing knowledge base because people can exchange ideas and knowledge (Chugh, 2017:5).
- Social media enables the use of inexpensive tools to interact and communicate with customers which could increase the revenue of organisations and businesses (Neti, 2011:3).

2.10.2.7. Limitations of social media

- There is no guarantee of the safety of personal information of users using social media and users are vulnerable to scams, phishing and identity theft (Raghavendra & Jayashri, 2014:153).
- Di Virgilio (2018:135) mentions that the use of social media is dependent on internet availability. In addition, lack of support or guidance on what knowledge to share as well as lack of encouragement to share knowledge might affect the buy-in of employees to communicate using social networks.

2.10.3. Digital repositories

Vrana (2011:55) describes a digital repository as a virtual container which can be used to store information for employees to access at any given time.

An example of a digital repository is SharePoint. SharePoint allows you to effectively manage the data contained on the servers of an organisation. SharePoint allows for users to organise collected data and knowledge in a meaningful manner through the use of effective cataloguing and the use of various tools and resources (RSS feeds, alerts, web parts, announcements, document libraries) (Matlakala & Pretorius, 2016; Hanan Al & Tahani, 2017). Matlakala and Pretorius (2016) mention a few benefits of Microsoft SharePoint below:

- Improved ability to upload documents with improved accessibility to retrieve these documents
- Integrated sharing feature makes it easier to share documents with peers
- Easy access to centralised electronic document repositories

2.10.3.1. Benefits of digital repositories

Vrana (2011:55-59) describes the benefits of using a digital repository below:

- The information is readily available and accessible to more than one employee at a time.
- Digital repositories have the ability to store and preserve information over a long period of time.
- The information in the repository is available in different formats. For example, videos, images, documents and audio can be used for training.

2.10.3.2. Limitations of digital repositories

Vrana (2010:36) describes some limitations below:

- Knowledge exchange is limited or not effective because people are unable to interact with each other, they are only able to access information.
- Employees are unable to get clarity in real-time when they do not understand the information available and require a deeper understanding.

One can deduce from the aforementioned that while there are many tools for knowledge sharing in organisations, choosing the most effective tools of sharing knowledge is important to ensure the development of employees as well as to promote teamwork in an organisation.

Knowledge sharing and organisational learning has transformed over time as a result of the evolution of various technologies and business requirements accompanied with various industrial revolutions. This has resulted in organisations have different generational groups who are accustomed to various knowledge sharing techniques.

2.11. Different generations in organisations

Various sources describe people from different generations and their characteristics. These generations are referred to as Builders, Traditionalists or Silent Generation; Baby Boomers; Generation X; Generation Y or Millennials; and Generation Z or iGen or the next generation (McCrindle, 2012; The Center for Generational Kinetics, 2015; Espinoza & Ukleja, 2016). McCrindle (2012) and Espinoza and Ukleja (2016) explain the different generations in organisations below:

Builders who were born between 1925 and 1945 are influenced by people that are authoritative and bureaucratic. They prefer training that is conventional and hierarchical and they prefer a "learning while working" approach. Builders also prefer an official and informative learning structure in a military-style, moralistic and meticulous learning setting. In addition, builders prefer leaders that have a high level of control and influence over subordinates.

Baby boomers who were born between 1946 and 1964 are influenced by people that have a high level of expertise. They prefer training that is practical and explicit with guidance from manuals and documents. Baby boomers thrive in a calm and regulated learning structure in an unobtrusive environment and classroom design learning setting. In addition, baby boomers prefer leaders that are authoritative and well-read.

Generation X who were born between 1965 and 1979 are influenced by specialists that can impart knowledge. They prefer training that is hands-on with records available for analysis. They prefer training on request. Generation X will flourish in an unstructured and collaborative learning structure in a relaxed atmosphere and a boardroom style learning setting. In addition, Generation Xs work well with leaders that are extroverts.

Generation Y who were born between 1980 and 1994 are influenced by practical associates. They prefer training that is expressive and contributing and they are in favour of storytelling. Generation Ys prefer a photographic learning structure in a coffee bar design learning setting with music playing. In addition, Generation Ys prefer to work with empowering and supportive teammates.

Generation Z who were born between 1995 and 2010 are influenced by user-produced channels. They prefer online training that is collaborative and incorporates various styles of learning. Generation Zs prefer a practical, learner-centred and tactical learning structure in a living room design learning setting with various forms of encouragement. In addition, Generation Zs prefer to work with inspiring and encouraging innovators.

The generation after 2010 was left out as this generation is not in the workforce as yet. There is little or inadequate knowledge sharing literature currently available on this generation to include in this study.

The different generations explained above can be found in many parts of organisations, some of these characteristics can even be found in various employees in one team; therefore, it is important that the employees are in an environment where they are able to share knowledge freely (Reychav & Weisberg, 2009:189; Leistner, 2010:61).

The relevance in the selection of the different generations in the organisation is based on the different knowledge sharing tools and methods used by each generation. The aim is to determine whether there is a difference in culture of sharing knowledge between the different generational groups in the organisation. This question was addressed in the interview questions in section 3.13.

2.12. Experts versus new joiners

Experts are referred to as employees that are knowledgeable in one or more subject matters (Kannan, 2011:489). Palanisamy (2013:22) states that experts are formed when routine and procedural work is carried out with continuous learning and through that process, the skill, proficiency and new knowledge is gained.

According to the various authors describing different generations in organisations, experts would be classified as Builders, Baby Boomers and Generation X while variations of

specialists and novices can be found in Generation Y and new joiners would be classified as Generation Z.

Kannan (2011:490) defines new joiners as people of a younger age group that are determined, highly motivated and aspiring. New joiners are referred to as rookies or novices or apprentices that are in the younger age group than experts and are new to the working industry. An example of a new joiner could be a newly employed person or an employee that moves to a different department in the same organisation (McCrindle, 2012).

According to Puranam (2015), novices in organisations generate ideas based on single parts of the organisation which include: staff employment and supply chain analysis while experts generate ideas and arrangements based on real-life scenarios and focus on goals that will serve the entire organisation which include the organisation of tasks, performance-based rewards and the relationship between employees and their managers.

Swap *et al.* (2001) describe the different levels of expertise of employees in Figure 2.1 below: For example, on a scale of 1 to 5, a novice would have the expertise level of 1 while an expert (named Master on the graph) would have the expertise level of 5.

Swap *et al.* (2001) mention further that leaders in the organisation will need to become more experienced at recognising the potential for the more experienced employees to encourage the flow of knowledge and share knowledge with less experienced employees.

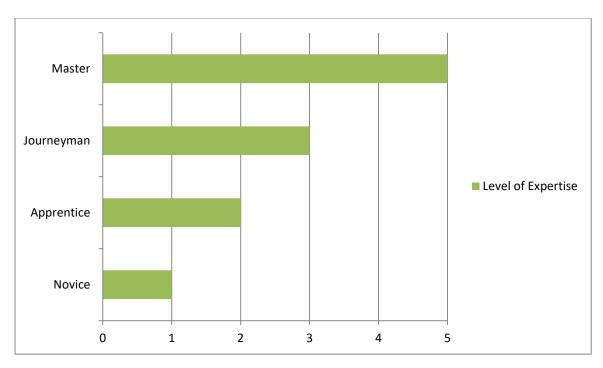


Figure 2.1 Level of Expertise (Swap et al., 2001)

The existence of various generations within an organisation creates an ecosystem where experts and novices co-exist which creates a platform for expert knowledge to be shared to close knowledge gaps that may exist.

2.13. Value of expert knowledge

Palanisamy (2013) explains the benefits of finding the experts in an organisation

- To develop the knowledge retention of the organisation.
- To decrease the amount of effort and money that would be used to find the appropriate expert for different challenges outside the organisation.
- To identify the experts' capability for knowledge sharing and teamwork across work units, divisions and locations.

One can deduce from the aforementioned that expert analysis is beneficial to an organisation, because organisations can identify experts that can transfer their knowledge to less knowledgeable employees in the organisation (Peña, 2014). Peña (2013) says that experts can transfer their expertise and knowledge through mentoring and coaching less knowledgeable employees in the organisation. Swap, *et al.* (2001) agree with Peña (2013) by stating that new joiners will be able to master different skills necessary if they are trained and exposed to different experiences. This way more experts can be created and the

knowledge will be preserved and retained within the organisation even when employees leave (Peña, 2014).

2.13.1. The motivation for learning of new joiners

PwC (2011) and Deloitte (2016) say that employees that are new to the organisation value autonomy. PwC (2011), Brack and Kelly (2012:4) and Smither, *et al.* (2016) describe below the motivation for learning of newly employed people:

- New joiners value personal growth and an equilibrium between their personal life and work commitments over monetary incentives.
- New joiners might be motivated to work in an organisation where there is an allowance for flexibility in their working hours. Some employees might live further away from the office than others, so an arrangement can be made for the employees to arrive at work either earlier or later than others.
- New joiners feel more comfortable when they are able to use technology openly and when technology is incorporated into their daily tasks. The use of technology will promote teamwork and aid their development.
- A culture of openness, collaboration, encouragement and innovation is also preferred by new joiners as well as recognition of effort and performance.
- Opportunities such as working for a period of time or attending workshops and training in another country, motivates new joiners in contributing to the organisation's knowledge base in their daily activities as they are exposed to different parts of the organisation as well as gaining a broader perspective of the industry.
- An organisation should assess the needs of new joiners and embed them in a way
 that will positively impact the organisational goals. This will create a vibrant
 environment for the new joiners and aid the effectiveness and efficiency of their
 performance.
- It is important that there is time spent on meeting with the employees regularly and keeping the team spirit alive so that the generation gap between new joiners and older employees will not become an obstacle, but that each employee can feel comfortable with learning and sharing knowledge with other colleagues in a respectful and sharing manner.

2.13.2. Expectations of the older generation in the workplace

Lynch (2008:7) as mentioned below states that the experienced employees have a different viewpoint and expectation about work and learning. The experienced employees prefer:

- Work that does not require teamwork but an individual effort from employees.
- Work that provides access to information that is governed and controlled.
- To have job security.
- To have managers that are skilled and proficient.
- To work in a structured and organised environment.
- To have well-defined limitations and boundaries.
- Working for a well-paying organisation.
- To have an organisation-defined career forecast for employees.
- Face-to-face communication with other employees.

Based on Lynch (2008:7), one can deduce that experienced employees will be more motivated to learn when they are in a workplace that meets the above expectations. One can also deduce that experienced employees and newly employed employees have different motivations for learning and working in an organisation. The challenge lies in bridging the gaps that might exist between the employees in order to ensure employee integration.

The sharing of expert knowledge is crucial to the effective integration of new joiners within the organisation. There are however barriers to knowledge sharing which frustrate the integration of generations with each other.

2.14. Methods to enhance and encourage knowledge sharing

This section aims to discover methods to enhance and encourage knowledge sharing between different generations as well as employees of different experience levels.

- Knowledge sharing could be enhanced through mentoring between knowledgeable employees and less experienced employees in the organisation (Kirk, 2012:4).
- Informal sessions such as storytelling could be used for knowledgeable and older employees to share their experience and their best practices over the years (Marsh, 2012:57).

- Communities of practice can be used to enhance knowledge sharing between a group of employees who are knowledgeable in the organisational processes and less experienced employees (OHCHR, 2011:23).
- Coaching can be used in the organisation for employees to discover their strengths that will guide their career paths (Macmillan, 2011:2).

Brčić and Mihelič (2015:862) mention that knowledge sharing should be driven from an organisational level, that is when leaders encourage knowledge sharing then employees at a middle and lower level will be motivated to share knowledge.

Brčić and Mihelič (2015:863) state that employees should be motivated to share knowledge with other employees through different incentives. In addition knowledge sharing can occur from the older generation to share their expertise and knowledge with younger employees. Younger employees can also share knowledge about new systems and technological innovations with experts in other fields (Brčić & Mihelič, 2015:863).

2.15. Barriers to knowledge sharing

In finding the motivation for experts sharing their knowledge, it is important to identify the barriers to knowledge sharing in the organisation. A few barriers of knowledge sharing are identified by different authors as described below:

Seba, Rowley and Delbridge (2012:120-122) and Jeenger and Kant (2013:3) mention a few barriers to knowledge sharing as stated below:

Leadership: Leaders who do not encourage knowledge sharing between employees or give any instructions to guide employees in knowledge sharing.

Time allocation: Employees with a heavy workload but not enough capacity might not have the time to share knowledge.

Trust: Lack of trust will cause employees to hoard knowledge instead of openly collaborating and sharing knowledge.

Organisational structure: The structure of the organisation will affect the way employees communicate. For example, a hierarchical structure might limit open communication between employees due to required pre-approval (Rishipal, 2014:56-57). This section links

back to section 2.7.1 which discusses the influence of organisational structure on organisational learning.

Jeenger and Kant (2013:3) mention further that lack of dedication from executives in an organisation as well as a lack of incorporation of KM in business practices can hinder knowledge sharing.

Zawawi *et al.* (2011: 63) and Seba, Rowley and Delbridge (2012:123) state that lack of organisational reward could be the reason some employees do not share their knowledge.

Hansen (2011:75) mentions that an increase in individual esteem indirectly drives the increase in organisational achievements with regard to marketing and advertising the organisation and a possible increase in organisational profits. Therefore, low employee esteem could be a knowledge sharing barrier. Zawawi (2011:62) and Jeenger and Kant (2013:3) agree with Hansen (2011:75) by stating that employees who are not motivated or challenged in their workplace, who do not have the confidence to share knowledge due to poor writing or speaking skills and poor interaction with computers and technology will not share knowledge.

2.16. Conclusion

The purpose of this literature review was to discover methods and tools that employees use to share knowledge in organisations, to identify factors that either encourage or hinder effective knowledge sharing between employees and also identify existing generations of employees in organisations and their motivation for sharing knowledge.

Various definitions were provided to support this research such as the working definition of knowledge, organisational learning, organisational culture, knowledge sharing and hoarding and KM. Technological advancements have assisted organisations in moving away from traditional methods of knowledge sharing such as classroom-type sharing sessions. Employees can share knowledge in a variety of ways that best suit them (OHCHR, 2011). Although the methods of sharing knowledge have grown and multiplied, the barriers within an organisation such as organisational structure, lack of trust and capacity as well as those pertaining to employees such as knowledge hoarding remain (Jeenger & Kant, 2013:3; Rishipal, 2014:56-57; Marouf, 2015:103). Organisations need to be prepared to go to great lengths to break down these barriers in order to cultivate a culture where knowledge sharing between employees is promoted, trust is encouraged and the environment enables

and supports valuable communication between employees (Stylianou & Savva, 2016:1516).

In addition, organisations need to understand the structures that make knowledge sharing challenging such as hierarchies and bureaucracies. Organisations also need to identify the gaps that might exist when considering what motivates employees of different experience levels and find ways to improve employee integration (Rishipal, 2014:56-57).

Chapter 3 – Research Methodology

3.1. **Introduction**

This chapter discusses the research design as well as the philosophical assumptions that support this study. Each philosophical assumption was discussed and the realism research paradigm was identified for the background of this study. This chapter also discusses the research approach and strategies as well as the sampling method, data collection methods and data analysis.

In addition, this chapter identifies some risks and uncertainties that arose during data collection and data analysis as well as steps that were taken to avoid or address the risks. This section also outlines the ethical considerations taken by the researcher when collecting data to fulfil the needs of this study as well as the limitations identified regarding this research.

The research design chosen for this study is exploratory using interviews and questionnaires to understand how important knowledge sharing is to employees, as well as to identify barriers that hinder effective knowledge sharing between employees in the chosen organisation. Qualitative and quantitative data analysis were chosen to analyse the data collected from the interviews and questionnaires respectively.

3.2. **Research philosophy**

Research philosophy is defined as the basic belief or understanding that will drive the entire research process, from the choice of research approach to the research strategy, method and analysis (Saunders *et al.*, 2012:128).

According to the research onion by Saunders *et al.* (2012:128), there are four research philosophies and they are: Positivism, Realism, Interpretivism and Pragmatism. Positivism, Realism, Interpretivism and Pragmatism are detailed below, of which one research philosophy will be selected.

3.2.1. Positivism

Positivism claims that knowledge of the world is acquired by using scientific means to understand the world and experiences from a practical perspective. Research generates facts and interpretations that are related to an independent reality. In essence, observation and measurement are at the core of scientific work – one can only solve a problem if the problem can be measured (Eriksson & Kovalainen, 2016:18-19). The aim of research is in finding fundamental explanations and consistencies in results when something is measured (Eriksson & Kovalainen, 2016:18-19).

Holloway and Galvin (2017:22) state that positivism is based on the belief in universal principles and regulations and endeavours to represent the world in an objective manner.

3.2.2. Realism

Realism claims that there is a world that exists and can be observed independently from human awareness (Eriksson & Kovalainen, 2016:20). In realism, the belief is that knowledge is created collectively (Eriksson & Kovalainen, 2016:20). Ritchie *et al.* (2014:21) add by saying that realism claims that while reality exists independently of humans, that reality can be interpreted based on the observations of humans.

The chosen research strategy for this study was realism because this study focuses on exploring the knowledge sharing culture of the company that was chosen for this study. Realism seeks to provide rationalisation and resolves "how" and "why" questions in an uninhibited and open manner. Realism claims that the study and examination of subjects should occur through empirical exploration instead of in laboratories (Robson & McCartan, 2016:30-31).

3.2.3. Interpretivism

Interpretivism answers questions related to how people view and interpret the world. The aim is to understand the behavior of people (Green & Thorogood, 2018:42). Interpretivism is concerned with how people, as individuals and collections, comprehend and interpret social interactions and actions (Eriksson & Kovalainen, 2016:20).

The process of interpretivism is as follows: at the beginning of a research study, existing theory is used to formulate the design and strategy for the study, develop the sampling method and create data collection and analysis tools. During analysis, the focus is on understanding and studying the participants in order to understand their beliefs, skills and capabilities from their perspectives (Ritchie *et al.*, 2014:22).

3.3. Qualitative research

There are three options when choosing how to conduct research which are: qualitative, quantitative and mixed method.

Mixed method research is research that includes both qualitative and quantitative research in one study, in order to better understand the research problem and question. Mixed method includes combining, incorporating, embedding and two strands of research (Creswell, 2012:535).

Quantitative research is defined by Kothari (2004:3) as research that measures data based on quantity or size. Mackey and Gass (2015:3) define quantitative research as an experimental approach which involves a hypothesis and statistically analysing data that is collected and used to prove or disprove the hypothesis. An example could be comparing the results of students' class tests in a school before and after changing teachers.

Qualitative research was used for this study to determine the knowledge sharing practices and the KM methods used in a financial services organisation in South Africa.

Qualitative research is research that to understand experiences, motivation and aspirations of the participants or target audience (Kothari, 2004:3). Mackey and Gass (2015:3) agree with Kothari (2004) by stating that a qualitative approach is informative and involves analysis of data that cannot be calculated or measured. Bryman and Bell (2015:38) go further with this idea by describing qualitative research as research that highlights words rather than quantity in the assembly and study of data.

Taylor, Bogdan and DeVault (2015:4) describe qualitative research as research that constructs informative data which includes people's specific written or verbal words as well as their apparent behaviour.

Qualitative research focuses on the participants' daily lives, experiences and struggles as well as the significance that participants attach to things and people in their lives (Taylor, Bogdan & DeVault, 2015:7-9).

3.3.1. Benefits of qualitative research

Qualitative research allows for a more detailed collection and analysis of data that is specific to a number of participants instead of the broader population (Flick, 2014).

Myers (2013:9) states that qualitative research can aid the researcher's understanding of the participants' behaviour, motivations and environment. Flick (2014:14) mentions further that qualitative research allows the researcher to identify and analyse participants' perspectives.

Salkind (2010:1160) and Hammersley and Traianou (2012:8) state that the design of qualitative research is emergent and adaptable. This means that the researcher can adapt the study to changes as they occur.

One can deduce from the aforementioned that qualitative research evolves as the researcher understands participants' behaviour, situation and perception.

3.3.2. Disadvantages of qualitative research

Myers (2013:9) states that qualitative research can only represent a part of the population and not the entire population in its findings because the study is specific to a few participants. Flick (2014:28) is in concordance with Myers (2013) by stating that results and conclusion in qualitative research cannot be generalised to all the population but they are relevant to a specific context.

Another limitation mentioned by Hammersley and Traianou (2012:106) is that the researcher might be invading participants' privacy while trying to gain an understanding of participants' behaviours, perspective and situation. This is because the researcher might observe and study the participants closely and gather information that the participant might not openly share.

3.4. **Research design**

Research design involves the specific measures and practices involved in the research process (Creswell, 2012:20). Research design can be used to collect data as well as to analyse and translate the collected data using qualitative, quantitative or mixed methods research (Creswell, 2012:293).

Mackey and Gass (2015:2) state that there are several ways of conducting research, which involves exploring theoretical and abstract ideas as well as realistic considerations.

Myers (2013:6) agrees with Mackey and Gass (2015) by stating that research is an inspired activity that steers the invention of new knowledge. Furthermore, research is of a practical

or theoretical nature and is conducted by people with expert knowledge about philosophies, research techniques and the field of study.

There are different types of research which are recognised by Onions (2012:79) as descriptive, experimentation, explanatory, exploratory, problem solving, proving, reflecting, situational change and testing.

The research design that was chosen for this study is exploratory in nature. An exploratory research design is used when the understanding of the subject is insubstantial, insufficient and unclear or the researcher requires additional knowledge about the subject. There is a broad and unbiased investigation at the beginning of the research due to uncertainty about the subject. In addition, exploratory research gives answers to what, why, who, where, when, which and how questions (Onions, 2012:79).

3.5. Research approach

The research approach for this study was an inductive approach. Dudovskiy (2016) describes the inductive approach as a research approach that does not comprise the construction of theories, instead it begins with research questions, purposes and goals that need to be answered and accomplished. The research process in this approach begins with observations or assessments which lead to patterns from which a theory is created.

Saunders *et al.* (2012:145) concur with the aforementioned by stating that the inductive approach entails gathering data and developing a theory from the analysis of the data.

Saunders *et al.* (2012:146) explain further by giving an example of a researcher using an inductive approach to find out why employees are absent at work. The process would involve conducting an interview with the staff and managers to find out their experience at work. The purpose of the interview would be to understand the culture of the workplace. The analysis of the data collected during the interview would aid the formulation of a theory.

The inductive approach was applied in this study as follows: Interviews were conducted and questionnaires were distributed to participants, the data collected from the interviews and questionnaires were analysed with qualitative and quantitative data analysis and a theory was created based on the analysis of the collected data.

3.6. **Research strategy**

This section focuses on some of the different research strategies that can be chosen for a study. There are different research strategies which are: case study, ethnography, grounded theory, action research, archival research, experiment and survey. The research strategy that was chosen for this research study is a survey. Semi-structured interviews were conducted and questionnaires were distributed to the participants chosen for the research study.

3.6.1. Survey

Surveys comprise of one or more techniques used to collect data from participants. These techniques include observations, questionnaires as well as structured and detailed interviews (de Vaus, 2014:3).

Surveys allow the researcher to collect data regarding the same concept from at least two data collection methods. An example would be a researcher collecting data from different participants using both questionnaires and interviews (de Vaus, 2014:3).

Creswell (2012:377) mentions that there are two types of surveys which are longitudinal and cross-sectional. Longitudinal surveys focus on studying individuals over a period of time and cross-sectional surveys are used to collect data about present-day elements, opinions or beliefs. The focus of this study was on cross-sectional surveys.

3.6.2. Aim of survey

The aim of a survey is to answer questions of how many people hold a certain viewpoint or estimate the number of people who interact in a certain manner or respond to different situations. Surveys help to find the general consensus among a group of people regarding a specific topic (Robson & McCartan, 2016:256).

The surveys that were used in this study are questionnaires and semi-structured interviews.

3.7. **Research method**

Research method comprises of data selection and collection methods, data analysis as well as the interpretation that researchers recommend based on their findings (Onions, 2012:84).

Kothari (2004:3-4) describes different types of research methods below:

• Descriptive vs. Analytical

- Descriptive research describes facts and events as they occur, without changing any part of it. This type of research is informative and the researcher has no power over the variables.
- Analytical research is a type of research where the researcher uses existing data to make deductions and critical analysis.

• Applied vs. Fundamental

- Applied research seeks to overcome hindrances and solves problems that occur in an organisation or in society.
- Fundamental research is research that is focused on discovering information that has a wide-ranging overview which improves the existing structured body of knowledge

• Conceptual vs. Empirical

- Conceptual research is a type of research that is linked to a hypothesis or idea and is used by scholars and philosophers to develop new theories or to illuminate current ones.
- Empirical research is dependent on knowledge or observation often without consideration for regularities and theory. It is research based on deductions which can be proved by observation or investigation.

Descriptive research was used for this study through the analysis of the interviews that were conducted and the questionnaires distributed. The collected data were presented in tables and figures for the questionnaires and presented in the form of direct quotations from respondents and themes that were identified from the respondents' responses.

3.8. Sampling method

Levy and Lemeshow (2013) define a research population as the entire collection of individuals that will be observed and studied. Acharya *et al.* (2013:330) mention that samples are adequately substantial representatives of the entire population. Dudovskiy (2016) describes sampling as detailed principles which aid the selection of participants from the population. The target population was employees from a financial services

organisation. The sample chosen for this study was a total of 40 participants, however 29 participants responded to the questionnaire and interviews.

3.8.1. Sampling approaches

There are two types of sampling approaches: probability sampling and non-probability sampling. Probability sampling occurs when the researcher has a comprehensive list of the population which provides each individual with an equal possibility to be chosen in the study (Acharya *et al.*, 2013:330). In non-probability sampling, the likelihood that an individual will be chosen is unknown which could cause bias in the selection of participants (Acharya *et al.*, 2013:332).

Non-probability sampling was used for the sampling of participants. There are five types of non-probability sampling which are: quota sampling, purposive sampling, snowball sampling, self-selection sampling and convenience sampling (Acharya *et al.*, 2013:332-333).

Purposive sampling is used for gathering qualitative data and is also used when the researcher personally decides on which participants to use in the study (Dudovskiy, 2016). Another name used for purposive sampling is described by Zikmund *et al.* (2013) and Dudovskiy (2016) as judgement sampling which is when participants are chosen based on the researcher's reasoning and decision about which characteristics the participants should have. Oppong (2013:203) adds that with judgement or purposive sampling, the researcher chooses participants that have understanding or knowledge of the subject matter.

Stratified purposive sampling was used for the selection of participants. Stratified purposive sampling is used when participants are divided into groups and classifications in order to select specific characteristics of subjects for analysis (Acharya *et al.*, 2013:332). Suri (2011:7) says that stratified purposive sampling is valuable for analysing different ways of executing a specific approach for learning and teaching. This sampling method, therefore, applies to this study, as it deals with learning. The strata that was used for this study was the level of experience of respondents and the inclusion of different departments in the organisation.

3.8.2. Sampling measures

The participants of the study had to meet certain conditions, namely:

• Participants were 18 years and older.

- Participants were either temporary or permanent employees there were more
 participants that were permanently employed than participants that were
 temporarily employed for both the questionnaires and interviews.
- Participants had different levels of experience ranging from 6 months to 10 years and over.

3.9. **Participants**

The process for selection for this study was as follows: Of the 40 participants that were chosen, only 13 people were interviewed and 16 people were given questionnaires. The participants that were interviewed were different from the participants that completed the questionnaires.

The participants included employees between the ages of 18 and 65. Employees from different departments, namely, Retail and Business Banking Technology; Technology Risk; Digital; Early Careers; and Finance were participants.

Participants that are temporarily or permanently employed by the organisation were also included. Temporary employees include contractors and employees in the internship programme.

3.10. Validity and reliability

3.10.1. Validity

Van der Watt (2008:22) describes validity as the accuracy and efficiency of the method used to assess the data that is collected. Drost (2011:114) and Kumar (2011:166) define validity as the process of ensuring that the research mechanisms are evaluating data as planned and intended.

Drost (2011:115) mentions four types of validity, namely: internal validity, statistical deduction validity, construct validity and external validity. Statistical deduction validity focuses on the relationship that exists between two variables based on the conclusion made from data collection. This validity defines how accurate a conclusion or deduction is when evaluating the statistical data. This validity was excluded because this study included both quantitative and qualitative data and this study followed an inductive approach, not a deductive approach.

Construct validity focuses on proving cause and effect behaviours in a relationship and proving whether the test measured what it said it would measure. This validity was excluded because it focuses on tests and measurements which is appropriate for purely quantitative research (Drost, 2011:116).

The external validity was excluded because it describes how easily the study can be generalised across individuals, location and time (Drost, 2011:120). In qualitative data, each situation, study and participant is different, therefore, the results cannot be generalised because experience and behaviour cannot be predicted or measured (Dudovskiy, 2016).

This study focused only on internal validity. Internal validity describes the legitimacy of the entire study. Factors that can pose a threat to internal validity are: history, analysis, collection and interpretation. The history or experience of the researcher might affect the collection of data as well as the interpretation of the data. The researcher's interpretation or analysis of the collected data is subjective, this means that the results of the analysis of the collected data will be subjective (Drost, 2011:115). Internal validity was ensured by conducting the study on different departments in the organisation and the participants included employees in different departments and with different levels of experience.

3.10.2. Reliability

Kumar (2011:168) states that reliability is a data measurement tool that ensures data collection results are secure, probable and accurate. Onions (2012:97) mentions that ensuring reliability means that the research is dependable and that the outcomes can be replicated provided that the same methodology is followed.

Onions (2012:97) further explained how reliability can be ensured below:

- Transcribed records should be retained and stored to ensure that the collected data can be reviewed for auditing purposes.
- Results should be retained so that the reasoning and deductions are clear and unambiguous.
- Any reasoning and deduction from the data analysis should be clearly explained and supported by the data collected.

To ensure reliability of this study, all the interviews were completed in the same venue within the organisation to decrease any outside interference. In addition, all the

questionnaires were distributed and the interviews were conducted within a short time frame to avoid any discrepancies in results.

3.11. Data collection methods and tools

Semi-structured interviews and questionnaires were used in the study to collect data from the participants.

3.11.1. Semi-structured interviews

Galletta (2013:24) describes semi-structured interviews as adequately structured interviews that focus on specific topics linked to the phenomenon of study while giving way for participants to propose new meaning to the research focus. Galletta (2013:24) mentions further that the semi-structured interviews can be arranged into sections, which include completely open-ended questions as well as more practical questions.

3.11.1.1. Advantages of semi-structured interviews

- Semi-structured interviews create the atmosphere for the researcher to probe the participant's answers for further explanation, better interpretation and critical thinking (Galletta, 2013:24).
- Muijs (2011:38), Rabionet (2011:564) and Lankesar (2014:32) agree with the
 aforementioned by stating that semi-structured interviews can include the specific
 subject while giving the participant freedom to provide more details and stories as
 well as allowing the interviewer to clarify and expand if the participant does not
 understand the questions.

3.11.1.2. Disadvantages of semi-structured interviews

- Muijs (2011:38) mentions that the disadvantage to semi-structured interviews is that
 interviewees might view the questions as invasive and choose not to cooperate. For
 example, the interviewee can refuse to elaborate on their response or choose to opt
 out of the interview.
- Van Teijlingen (2014:22) mentions that interviewees might give an ideal social response to the interview questions instead of their actual opinion or situation. In addition, interviewees might give subjective responses based on their prejudice or perception of the interviewer.

These disadvantages were overcome because the interview questions were wide-ranging and the participants were assured that their data and participation would be kept anonymous.

3.11.2. Questionnaire

Dudovskiy (2016) describes questionnaires as a qualitative or quantitative data collection method that can be distinguished based on the type of questions that are distributed to participants. Quantitative questionnaires usually include questions that do not require the participant to elaborate while qualitative questionnaires include open-ended questions that might require the participant to provide a brief description of their response where required. A quantitative questionnaire was used in this study.

3.11.2.1. Advantages of questionnaires

- Muijs (2011:38) states that questionnaires are well known to users and can provide
 a sense of convenience as the users have control over the location, time and pace at
 which the questions will be answered.
- Dudovskiy (2016) states that questionnaires have a high response rate and it requires little or no effort or cost as well as more objectivity from participants.

3.11.2.2. Disadvantages of questionnaires

• Dudovskiy (2016) mentions that questionnaires remove the opportunity for the researcher to provide some clarity on the questions in case the participant does not understand the question.

This disadvantage was overcome because the questions were clear and general. A pilot test was done on the questionnaire to ensure that the questions were unambiguous. The process of carrying out the pilot test was further explained in section 3.12.

 Muijs (2011:38) states that participants might take longer to complete questionnaires. In turn, this could add to the effort and time used by the researcher to track participants for feedback.

This disadvantage was overcome because the participants were given enough time to complete the questionnaire.

3.11.3. Data collection process

The participants were contacted through email or telephone to give them a briefing of the research. The briefing included the research background, objectives and the type of research method that the participant would be part of, which was either an interview or a questionnaire.

Questionnaires were distributed through email to the participants to review and complete. The participants were given the option to either type out their responses in Microsoft Word or fill in a printed copy of the questionnaire. Interviews were recorded and the respondents' responses were transcribed by the interviewer during the interview. The interviews were recorded so that the researcher can refer to the recordings for clarity on participants' responses. The interviews were conducted during the working hours of the organisation and occurred inside and outside of the offices at the participants' discretion. The time frame for completion of data collection using the questionnaires and interviews was one month.

The administration of copies of the questionnaire and conduct of the interviews was in English language. All communication to the participants was also in English.

3.12. Testing of interview and questionnaire

A pilot test refers to a preliminary trial of a research tool or method in order to identify errors; a pilot test on an interview or questionnaire would be carried out to ensure that the language and phrasing of questions are straight-forward and easy to understand by the participants (Kumar, 2011:342).

A pilot test of the questionnaires and interviews was carried out on two employees, to ensure that the questions are clear and comprehensible. One participant was given a questionnaire and the second participant was interviewed. Both participants mentioned that the questions were clear and unambiguous. The time to complete the interview and the effort to transcribe the participants' responses were also tested. Once the participants gave feedback, the questionnaires were distributed and interviews were conducted with the rest of the participants. The participants of the pilot test were employees from different departments in order to limit any form of bias.

3.13. Research questions and data collection questions

This section discusses how the data collection questions, namely the questionnaire and interview questions, link to the research question of this study. Each section of the questionnaire and interview questions will be discussed in relation to each research sub question.

3.13.1. Main research question

How could the knowledge transfer between experienced employees and new hires be improved at a financial services organisation?

3.13.1.1. Research sub-question 1

In what way does the existing culture of Company X hinder or encourage effective knowledge sharing?

In section 2 of the questionnaire and interview questions, the focus was on the participant's view of the importance of knowledge sharing; encouragement to share knowledge in the organisation; tools used to share knowledge; participant's availability to guide or mentor new employees; assigned mentors in the participant's team/department; participant's level of ease of bringing solutions or identifying knowledge gaps; participant's level of ease of asking for help and identifying gaps in knowledge sharing activities in the participant's team/department.

This section is relevant to the research question because the encouragement to share knowledge, tools used to share knowledge and level of ease of challenging status quo and asking for help speaks to the culture of the department/organisation and the answers to the questions revealed whether the organisation hinders or encourages effective knowledge sharing.

Section 6's questions focused on the participants' interpretation of organisational learning and learning in an organisation as well as whether the organisation invests in the employees and up-skills them.

This section links to the research question because it revealed the awareness and understanding that the employees have of learning from an individual and organisational perspective. In addition, one can understand whether the organisation's culture focuses on employee development.

3.13.1.2. Research sub-question 2

What is the most effective or preferred knowledge sharing method and tool that will improve employee growth, innovation and knowledge sharing between employees with different levels of expertise?

Section 5's questions focused on the participant's method of knowledge searching; frequency of classroom style and virtual learning/training sessions and encouragement and incentives for obtaining professional certifications.

This section is relevant to the research question because the response from the participants revealed the employees' preferred method of learning and sharing knowledge. It also revealed whether the organisation provides employees with the opportunity to develop their skills by training/learning inside the organisation or externally.

Section 7's questions focused on participant's view of the link between productivity and effective knowledge sharing; method of learning and frequency of brainstorming sessions between employees.

This section is relevant to the research question because it revealed the preferred method of learning that will increase the employee's understanding and improve their skill development. This section also revealed whether employees brainstorm ideas to find solutions and create new knowledge.

3.13.1.3. Research sub-question 3

What is the process of knowledge sharing between employees of different level of expertise throughout the employment cycle?

In Section 1, the participants were asked to state whether they are permanent or temporary employees and also to fill in the number of years of employment overall and specifically at the organisation. This section speaks to the first research sub-question because it identified the diversity of employees in the organisation in terms of job experience. This section also revealed whether the organisation employs people with little or no experience as well as people with many years of experience. One could deduce that the organisation choosing employees with little or no experience means that the organisation is willing to provide those employees the opportunity to develop and grow in their specific roles and in the organisation.

Section 3 focused on the participant's level of ease with pitching ideas; platforms to pitch ideas, leadership's encouragement/drive of knowledge sharing; organisational objective of knowledge sharing; knowledge sharing policies; knowledge sharing inclusion in employees' KPI as well as inclusion of employees in reviews and implementation of knowledge sharing processes and tools.

This section is relevant to the research question because understanding the above aids the understanding of the process of knowledge sharing between employees of different levels of expertise. One can argue that employees might not feel comfortable pitching an idea to other employees in the organisation if they do not have a platform/opportunity to share, they are not encouraged or driven to share from a team or organisational level and they are not included in any knowledge sharing process.

Section 4's questions focused on the participant's understanding of KM; organisation's focus and marketing of KM to employees; integration of employees from different generations and availability of library/repository that stores business processes.

This section is relevant to the research question because identifying whether KM is an employee or organisational focus revealed the culture of the organisation in regards to their value of knowledge. Identifying whether employees from different generations work together revealed whether the organisation values diversity in the creation and sharing of knowledge.

Section 8 focused on the availability of subject matter experts in the participants' department as well the knowledge transfer process when employees leave the organisation.

This section is relevant to the research question because it revealed whether there is open communication between subject matter experts and other employees. The transfer process of knowledge between employees leaving the organisation and employees still employed is also revealed. The above links to the culture of the organisation and how it affects knowledge sharing.

3.14. Data analysis

Analysis is described by Onions (2012:43) as a method that involves closely examining the subject under study and finding meaning and logic from the data collected. Quantitative and qualitative data analysis was used to analyse the data collected for this study.

3.14.1. Quantitative data analysis

Quantitative research is the process of collecting statistical data to explain a specific phenomenon (Muijs, 2011: 2).

Harwell (2011:149) agrees and states that in quantitative research, deductions made from analysis of statistical data lead to general deductions about the characteristics of people. Creswell (2009:16) and Nolan and Heinzen (2013:53) state further that the statistical process followed in quantitative research include using means, standard deviations and ranges to analyse collected data.

In this study, quantitative data analysis, namely descriptive statistics was used to analyse the closed-ended questions received from participants in the data collection process. Each question in the questionnaire was tabulated and it included: number of participants and percentage. The questionnaire was also presented in percentages on bar and pie graphs. At the end of each section, the average number of participants versus their responses were measured. The numbers and measurements were recorded in a Microsoft Excel document.

3.14.2. Qualitative data analysis

Data analysis in qualitative research involves finding common themes within the participants' responses and analysing the themes critically in order to accomplish research goals and purposes (Dudovskiy, 2016).

Dudovskiy (2016) describes the process of data analysis as described below:

First step: Creating and applying codes: Coding can be described as the classification of the collected data. The codes should be given titles that are significant to the theme. An example could be to code words that symbolise an idea or topic. An extensive variety of unquantifiable elements such as actions, perceptions, experiences and behaviours can be coded.

Second step: Recognising themes, connections and ideas: In qualitative research, the research results cannot be generalised because each experience, theme and pattern is different for each participant. However, techniques that can be used to identify and interpret the collected data are described below:

Repetition of terms and expressions – examining collected data for terms,
 phrases and expressions frequently used by participants.

- Data assessment or examination evaluating the results of the interview and questionnaire and examining variances between the methods.
- Exploration of information that may have been omitted by participants in their responses to the interview questions or questionnaires.
- Metaphors and analogies comparing primary research findings to phenomena from a different area and discussing similarities and differences.

Third step: Reviewing the collected data: In this stage, the research results should be linked to the research goals and purposes. In the data analysis chapter, significant quotations from the collected data should be used in order to analyse the themes as well as differences.

3.15. Ethical considerations

All the participants in this research study were given consent letters that were signed before the questionnaires were distributed and interviews were conducted. The participants involved in the pilot test were also given the consent letter.

In this letter, a full brief of the research, as well as an assurance of anonymity and confidentiality, was provided. The participants were assured that their participation was not mandatory and they had the freedom to withdraw at any time without being penalised.

Written permission for distribution of questionnaires and conducting of interviews was granted by the financial services organisation.

In addition, the participants were treated respectfully during the data collection process.

All the works cited in the body of the dissertation were properly attributed with in-text referencing and a reference list. In addition, a plagiarism test was conducted on the dissertation to ensure that there was no data misconduct.

In order to mitigate the risk of fabrication and falsification of data, stratified purposive sampling was selected for this study in order to ensure that the chosen respondents are reliable and the results are credible.

3.15.1. Confidentiality and anonymity

All the participants were notified that the information collected from questionnaires and during interviews will be confidential and handled only by the author. Names of participants have not been mentioned to ensure anonymity and the organisation's name has also been kept anonymous.

3.16. Conclusion

The research methodology used seeks to guide the author in collecting data that will support or debunk his/her theory. The research methodology discussed in this chapter comprises the definition of the research design, research approach, research strategy and research method; description of the sampling method, the data collection method, validity and reliability of the study, the participants, as well as the ethical considerations and research limitations. Qualitative research was adopted, using a stratified purposive sampling technique. A cross-sectional survey was carried out using questionnaires and semi-structured interviews.

The data collection questions were matched to the research questions to describe how the data collection questions will provide answers to each research question.

Quantitative data analysis was done by presenting the data in the form of tables and graphs and represented in numbers and percentages. Qualitative data analysis was done by identifying themes from the responses received during the interviews.

The next chapter will discuss the analysis of the data collected as well as the interpretation of the results.

Chapter 4 - Data Analysis

4.1. Introduction

This chapter discusses the analysis and findings from the data collected through interviews and questionnaires from employees in a financial services organisation. The analysis was discussed in two parts. The first part is the analysis and findings from the questionnaire and interviews and the second part includes the analysis of sections from the interviews that are different from the questionnaire.

The purpose of this study was to find out how knowledge is transferred between newly employed or less experienced employees and experts in the organisation.

The objectives of this study were:

- To understand the KM structure of Company X.
- To understand existing methods of knowledge sharing between employees.
- To understand the causes of knowledge hoarding of employees.
- To understand the mechanisms that can be used to share knowledge more effectively.

Informed consent forms and questionnaires were distributed to the participants. The employees signed the consent forms and then completed the questionnaire. Interviewees signed the informed consent forms before the interviews began. A copy of the interview questions was given to each interviewee at the beginning of the interview. The informed consent forms were stored separately from the questionnaires and interviews to ensure complete anonymity.

A total number of 16 employees completed the questionnaires between 4 December 2017 and 15 December 2017. A total number of 13 interviews were conducted between 11 December 2017 and 11 January 2018.

20 questionnaires were sent out and 16 were received. 20 people were approached for interviews and only 13 responded and were interviewed.

After the questionnaires were collected, the responses were tabulated according to number and percentage of answers to the questions. The findings of both interviews and questionnaires were analysed according to the different sections of the questionnaires. The sections were:

- Demographic questions.
- Knowledge sharing.
- Culture.
- KM.
- Employee training.
- Learning methods.
- Knowledge retention.

Some respondents did not answer all the questions and some of the questions had multiple options that could have been selected so the percentages recorded on the tables were all based on individual responses to that specific question. In addition, the respondents' quotes were referenced by the naming convention of Respondent 1 - Respondent 13.

4.2. Analysis of findings - Questionnaire

4.2.1. Demographic information

In this section, the respondents were asked to state whether they were employed as a permanent or a temporary employee in the organisation. The respondents were also asked to state how many years they had been working in the organisation as well as how many years they had been employed overall. The reason for the distinction in years of employment is to identify the level of experience of each respondent. In addition, identifying the years of employment overall will show whether employees have gained experience from previous organisations or only from the current organisation.

4.2.1.1. Employment status of respondents

Table 4.2-1 – Employment status of respondents

Questionnaire			Interviews		
Employment status	Number	Percentage	Employment	Number	Percentage
			status		

Temporary employees	3	18.75%	Temporary employees	1	7.69%
Permanent employees	13	81.25%	Permanent employees	12	92.3%
Total	16	100%	Total	13	100%

Table 4.2-1 shows that 18.75% of the respondents were temporary employees and 81.25% were permanent employees. From these figures, we deduce that the majority of the participants that completed the questionnaire were permanently employed in the organisation. In addition 7.69% of the respondents were temporary employees and 92.3% were permanent employees. From these figures, we deduce that the majority of the participants that completed the questionnaire were permanently employed in the organisation.

4.2.1.2. Years of experience of respondents

Table 4.2-2 - Respondents' years of experience - questionnaire

Years of employment Company X	Number	Percentage	Years of employment overall	Number	Percentage
0-5 months	3	18.75%	0-5 months	0	0%
6 months – 2 years	7	43.75%	6 months – 2 years	5	31.25%
3 years – 5 years	4	25%	3 years – 5 years	2	12.5%
6 years – 10 years	2	12.5%	6 years – 10 years	4	25%
10 years	0	0%	10+ years	5	31.25%
Total	16	100%	Total	16	100%

Table 4.2-2 shows that 18.75% of the respondents have been working in the organisation between 0 and 5 months, 43.75% of the respondents have been working in the organisation for between 6 months and 2 years and 12.5% of the respondents have been working between 6 years and 10 years.

Overall 31.25% have been employed since they finished school between 6 months and 2 years, 12.5% of respondents have been employed overall between 3 and 5 years, 25% have been employed overall between 6 and 10 years and 31.25% of respondents have been employed overall for over 10 years. Of all the respondents, there was no representative from employees who have been employed overall for less than 6 months. There is also no representative of employees who have been employed in the organisation for over 10 years.

One can deduce from the above that 68.75% of the respondents have worked in other organisations before joining Company X while 31.25% of the respondents have only worked at Company X.

Table 4.2-3 – Respondents' years of experience - interviews

Years of employment Company X	Number	Percentage	Years of employment overall	Number	Percentage
0 - 5 months	2	15.38%	0 - 5 months	0	0%
6 months – 2 years	8	61.53%	6 months – 2 years	3	23.07%
3 years – 5 years	3	23.07%	3 years – 5 years	4	30.76%
6 years – 10 years	0	0%	6 years – 10 years	0	0%
10 years	0	0%	10+ years	6	46.15%
Total	13	100%	Total	13	100%

Table 4.2-3 shows that 15.38% of employees have been working in the organisation between 0 and 5 months, 61.53% of employees have been working in the organisation for between 6 months and 2 years and 23.07% of employees have been working between 3 and 5 years.

Overall 23.07% have been employed between 6 months and 2 years, 30.76% of respondents have been employed overall between 3 and 5 years and 46.15% of respondents have been employed overall for over 10 years.

One can deduce that 64.28% of the respondents have worked in other organisations prior to working at Company X while 35.71% of the respondents have only worked in Company X.

Of all the respondents, there was no representative from employees who have been employed in the organisation and overall for less than 6 months or between 6 and 10 years. There is also no representative of employees who have been employed overall for over 10 years.

4.2.2. Knowledge sharing

In this section, the aim was to find out the knowledge sharing practices of employees, their perceptions about knowledge sharing importance and the tools that they use to share knowledge.

4.2.2.1. Importance of knowledge sharing

Respondents were asked to rate the importance of knowledge sharing on a Likert scale between one and five. One means that knowledge sharing is not important, two means that knowledge sharing is somewhat important, three and four means that knowledge sharing is important and five means that knowledge sharing is very important.

Table 4.2-4 – Importance of knowledge sharing rated between one and five

Response	Number	Percentage
1	0	0%
2	1	6.25%

3	1	6.25%
4	4	25%
5	10	62.5%
Total	16	100%

Table 4.2-4 shows that on a scale of one to five where one would be that knowledge sharing is not important at all and five would be that knowledge sharing is very important, 6.25% of the respondents rated two, 6.25% of rated three, 25% rated four and 62.5% rated five. The majority of the respondents rated four and five meaning that knowledge sharing is important and very important, respectively and two respondents rated two and three meaning that knowledge sharing is not important and somewhat important, respectively.

One can surmise that the employees that rated the importance of knowledge sharing as two or three might not be active in using tools, or performing activities that will enable or promote knowledge sharing. Another perspective could be that the employees do not understand the value of knowledge sharing so they do not see the importance.

During the interview phase a large majority (12 out of 13 respondents) identified knowledge sharing as very important and critical within an organisation.

Three themes were identified through the elaborated responses of the respondents:

 Growth – Five respondents spoke about employees learning from previous mistakes and avoiding them, sharing ideas and growing through knowledge sharing as well as the organisation growing through knowledge sharing. In addition, employees spend less time re-inventing the wheel to deliver projects and less time is spent up-skilling themselves.

Respondent 8 said: "new joiners can learn and grow with knowledge sharing"

 Knowledge hoarding – Three respondents mentioned how knowledge hoarding negatively impacts the company and intellectual property is lost when employees leave the company. In addition, knowledge gaps are created when people do not share knowledge. Access to knowledge – Three respondents mention that there are different parts, pieces and systems in the organisation and not every employee has access to all the information available in the organisation so knowledge

When asked as to how their department supports or encourages knowledge sharing between employees, two themes were identified when analysing the responses:

- Journey Four respondents said that there is recognition of the need for knowledge sharing and a drive to put mechanisms in place to assist knowledge sharing. The current process involves support for knowledge sharing but there is no implementation in the sense that employees are not empowered or enabled to share knowledge. In addition, there is also an acknowledgement of Agile and scrum processes from leaders in the organisation. The Agile process will improve collaboration and knowledge sharing between employees.
- Collaboration Eight respondents said that there is open communication and collaboration among employees, there is encouragement and support from leaders in the organisation for employees to share knowledge and there are formal sessions that are set up for knowledge sharing where employees can openly share and give feedback. The knowledge sharing culture makes it easier for employees to learn and up-skill themselves at a quicker turnaround time.

One respondent said that employees worry about their jobs, therefore no efforts are made to support or encourage knowledge sharing by their department.

One can deduce from the above themes that different cultures of knowledge sharing exist in different departments, which could be as a result of the organisation's lack of knowledge sharing strategy. If the organisation does not have one voice regarding knowledge sharing then each department will define its own culture of knowledge sharing

4.2.2.2. Collaborative tools used in the department

Respondents were asked to choose which collaborative tools they use to share knowledge in their department.

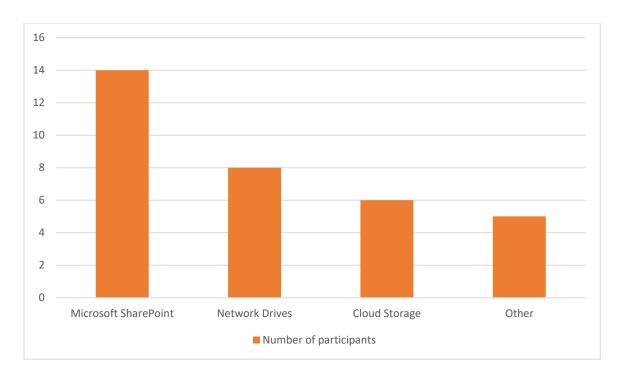


Figure 4.2-1 - Collaborative tools used by respondents in their department

Figure 4.2-1 shows that 87.5% of respondents chose Microsoft SharePoint, 50% chose network drives, 37.5% chose cloud storage and 31.25% chose other. Eight participants marked multiple boxes and four people marked only one box. Two participants chose Confluence and JIRA as their other collaborative tool, two participants chose Confluence, one participant chose JIRA, Confluence, Bitbucket and Amazon Web Services and one participant chose Atlassian.

All of the respondents during the interview phase, stated that they use some or all of the aforementioned collaborative tools. Other tools that were mentioned include, WhatsApp, Jabber, Trello, GitHub and network drives. All of the respondents mentioned that the tools are used for storing and sharing data between employees so that they can refer to or use the data later with respondent 3 stating "we are able to track progress so we can make sure that we are meeting deadlines".

From this responses, one can deduce that employees in the organisation use a wide range of collaborative tools to share knowledge with other employees.

4.2.2.3. Challenges that hinder knowledge sharing in the respondents' department

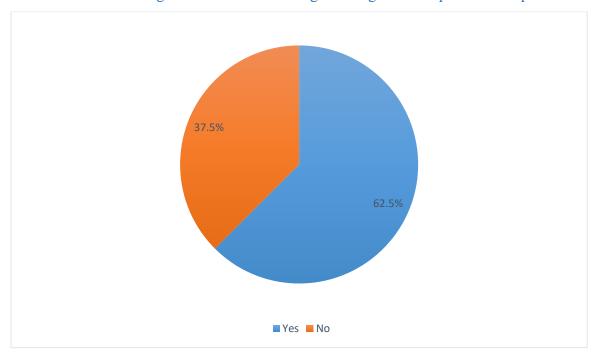


Figure 4.2-2 - Indication of challenges that hinder knowledge sharing in respondents' department

Figure 4.2-2 shows that of the respondents, 62.5% said that there are challenges that hinder knowledge sharing in their department and 37.5% said that there were no challenges that hinder knowledge sharing.

Knowledge Hoarding culture Lack of collaboration among employees Lack of collaborative tools Other 0 2 4 6 8 10

4.2.2.3.1. Selection of challenges that hinder knowledge sharing

Figure 4.2-3 – Challenges that hinder knowledge sharing in the respondents' departments

Number of respondents

The respondents who said that there are challenges that hinder knowledge sharing had to choose which challenges they were experiencing in their department. Figure 4.2-3 shows that 10% of respondents said their challenge for sharing knowledge is lack of collaborative tools, 80% chose knowledge hoarding culture, 50% chose lack of collaboration among employees and 20% chose other.

Out of the 62.5% of respondents, 50% chose one option only and the other 50% respondents chose multiple options in this section. Two of the respondents did not choose any of the provided options but they indicated that there were other challenges that hinder knowledge sharing in their department. One respondent mentioned ego as a challenge and one other respondent mentioned that some people find it difficult to explain the knowledge in their head.

During the interview phase, two respondents said that there are no challenges that hinder knowledge sharing. Eleven respondents said that there are challenges. These challenges include:

Reluctance to share – Five respondents mentioned that experts are not willing or
eager to share their knowledge, employees work in silos and isolate themselves so
there is no opportunity for collaboration or knowledge sharing. In addition, some
employees have hidden agendas so they are not willing to share their knowledge.

 Capacity – Three respondents mentioned that they do not have enough time to share knowledge because they have other work deadlines, knowledge sharing is not mandated in the organisation so there is no time allocated to it, knowledge sharing only occurs when there is a strategic need for it.

Management – Three respondents mentioned that the knowledge sharing tools are not utilised and information is not updated or managed appropriately.

4.2.2.4. Assigned mentors/coaches to assist new employees

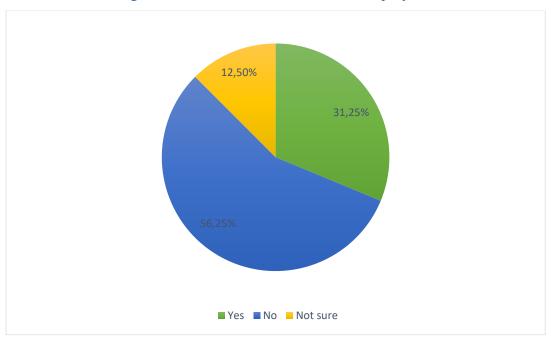


Figure 4.2-4 – Indication of assigned mentors/coaches to assist new employees

Figure 4.2-4 shows that, 31.25% said that new employees are assigned coaches/mentors, 56.25% said that new employees are not assigned mentors/coaches and 12.5% were not sure whether new employees are assigned coaches or not.

One can surmise that the 12.5% of respondents that were not sure about the coaches/mentors assigned were either not assigned to coaches when they joined the company or the process for assigning mentors to new employees is not clear in the respondents' departments.

4.2.2.5. Availability to mentor new hires in the department

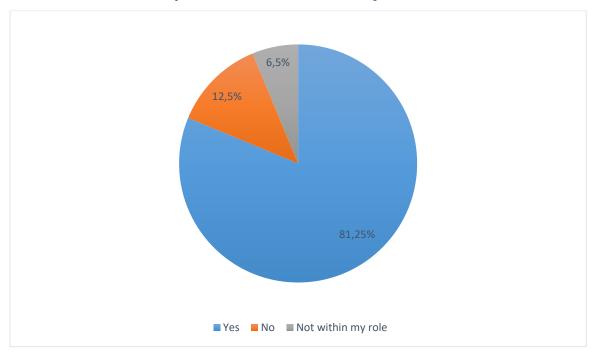


Figure 4.2-5 – Availability of respondents to mentor new hires that join their department

Figure 4.2-5 shows that 81.25% of respondents said that they make themselves available to new employees, 12.5% said they do not avail themselves and 6.25% said that they do not have that opportunity within their role.

Eleven interviewed respondents said that they avail themselves to mentor newly employed employees when they join their department. Respondent 6 said that it would depend on whether their role aligns with the new employee's role. Respondent 3 said "no" and gave the reason that there is no opportunity to mentor new employees in their role



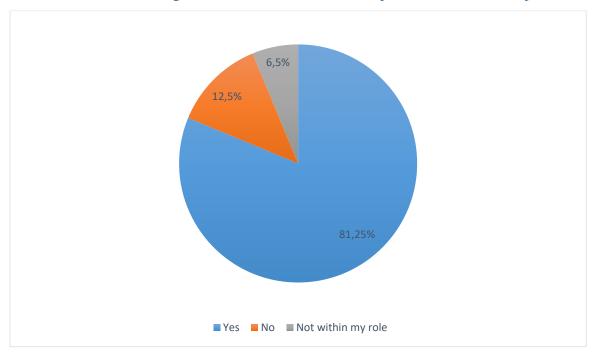


Figure 4.2-6 – Availability of respondents to introduce new hires to common best practice within their department

One can gather from the above Figure 4.2-6 regarding employee availability to aid the learning process of new employees, that 12.5% of respondents who said no to availability to mentor new employees and 6.25% of respondents who said no to introducing new employees to best practices could either not be open to knowledge sharing or the culture of their department/team is such that the department/team does not encourage knowledge sharing.

On the other hand, one can surmise that 81.25% of respondents who said yes to their availability to mentor new employees and 81.25% of respondents who said yes to introducing new employees to best practices are possibly more comfortable with sharing knowledge and their department encourages knowledge sharing.

Twelve interviewed respondents said that they introduce new employees to common/best practices within their department. Respondent 13 mentioned: "As far as possible, people try to figure things out themselves" while respondent 4 said "no", because they do not believe in best practices.

Not applicable Very comfortable Uncomfortable Very uncomfortable 0 2 4 6 8 10 12 14 16

■ Number of respondents

4.2.2.7. Level of comfort with sharing new ideas that challenge the status quo

Figure 4.2-7 – Level of comfort with sharing new ideas that challenge the status quo

Figure 4.2-7 shows that 6.25% of respondents said they were very uncomfortable with sharing new ideas that challenge the status quo, 37.5% said they were comfortable and 56.25% said they were very comfortable. There were no respondents who chose "uncomfortable" or "not applicable".

During the interview phases, nine respondents said that they are comfortable with sharing new ideas that challenge the status quo with one of these respondents mentioning that the ideas can be shared but they are not usually implemented. Four respondents said that they are not comfortable and the reasons they gave were:

- Respondent 1 "Culture of the institution does not allow challenge"
- Respondent 3 "Don't get feedback at all, discouraging"
- Respondent 5 "People don't like when you challenge them"
- Respondent 11 "Red tape, people take your idea"

4.2.2.8. Resources used to support ideas within the team

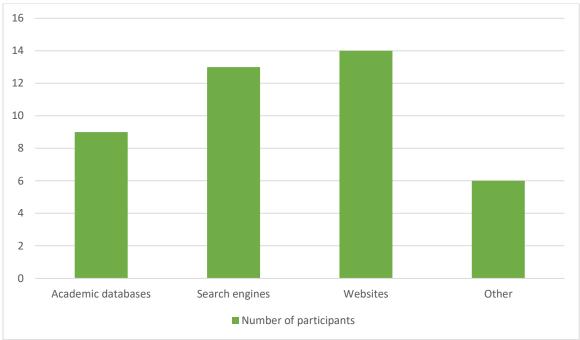


Figure 4.2-8 - Resources used by respondents to support ideas within their team

In this section, respondents could choose multiple answers to the question. 12.5% of respondents chose only one answer and 87.5% of respondents chose multiple answers. Figure 4.2-8 shows that 56.25% of respondents chose academic databases, 81.25% of respondents chose search engines, 87.5% of respondents chose websites and 31.25% of respondents chose other.

Out of the 37.5% of respondents who did not choose either academic resources, search engines and websites: 33.3% of those respondents chose other people or colleagues as their research resource, 16.7% chose LinkedIn, 16.7% chose API (Application programming interface) documentation and 33.3% of the respondents chose blogs.

4.2.2.9. Level of comfort with approaching peers or seniors when in need of information/knowledge

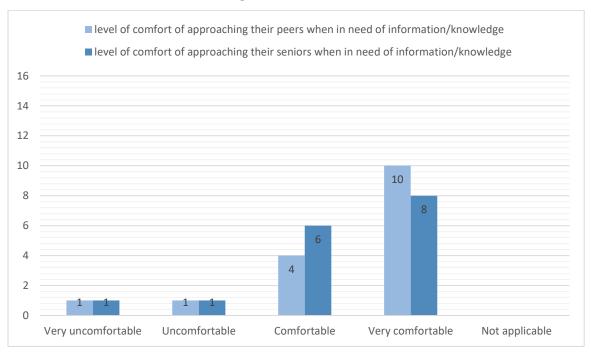


Figure 4.2-9 – Level of comfort with approaching peers and seniors when in need of information/knowledge

Figure 4.2-9 shows that 6.25% of respondents said they were very uncomfortable with approaching their peers when in need of information/understanding, 6.25% said they were uncomfortable, 25% said they were comfortable and 62.5% said they were very comfortable. None of the respondents chose "not applicable".

6.25% of respondents said they were very uncomfortable with approaching their seniors when in need of information/knowledge, 6.25% said they were uncomfortable, 37.5% said they were comfortable and 50% said they were very comfortable.

All the interviewed respondents said that they are comfortable with approaching their peers when they are in need of information/knowledge. One respondent said that they have to 'check the situation' before approaching their peer.

Ten respondents said that they are comfortable with approaching their seniors when they are in need of information/knowledge. One respondent mentioned that they are more comfortable when the senior is inside their team.

Three respondents said they are not comfortable with approaching their seniors. The reasons mentioned were that some seniors are not open to employees that are not on the

same experience level and some senior employees procrastinate which delays the feedback needed. Respondents explained further that it depends on which senior and the level of relationship one has with the senior employee.

4.2.2.10. Frequency of different generational employees working together

Table 4.2-5 - How often different generational employees work together

Response	Number	Percentage
Regularly, employees are fully integrated	12	75%
Occasionally, when there is a need	4	25%
Never	0	0%
Other	0	0%
Total	16	100%

Table 4.2-5 shows that 75% of respondents said different generational employees work together regularly, 25% of respondents said occasionally, none of the respondents chose never or other.

4.2.2.11. Knowledge sharing gaps

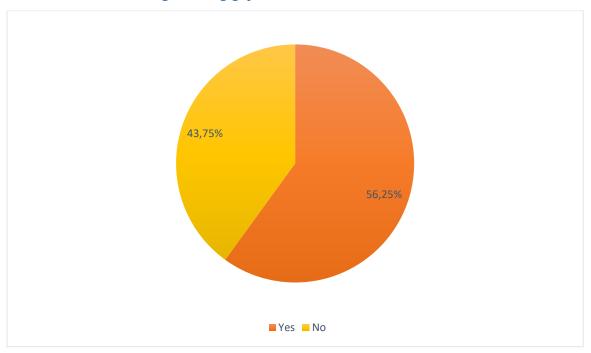


Figure 4.2-10 – Indication of gaps that exist within respondents' team's knowledge sharing activities

Figure 4.2-10 shows that 56.25% of respondents said that there are gaps that exist within their team's knowledge sharing activities, 43.75% of respondents said that there are no gaps. The gaps identified by the respondents are:

- Ego among employees that hinders the mentoring of junior employees.
- Busy schedules that keep employees from sharing knowledge.
- Knowledge sharing sessions are not enough.
- Roles within the team are not understood by all employees.

Ten interviewed respondents said that there are gaps but three respondents said that there are no gaps in the knowledge sharing activities within their team. The three respondents that said there are no gaps were all permanently employed in the organisation. When asked to elaborate where there are gaps the following themes that were identified in the respondents' responses include:

KM – Seven respondents mentioned that knowledge is not recorded and solutions
or lessons learned are not documented or shared so there is no opportunity to avoid
reinventing the wheel or making the same mistakes; there is no KM mechanism to
determine relevant information or update or manage information. In addition, there

is no adequate learning of the technical and business challenges that exist within the organisation.

 Culture – Three respondents mentioned that knowledge sharing is not driven by leadership, there are assumptions that people know and have knowledge when they do not. In addition, mentorship is not encouraged and there is not enough capacity to share knowledge so it is difficult to get knowledge from people with experience.

One can deduce from the themes that were identified that knowledge is not effectively managed in the teams because there is no one held accountable for managing the flow of knowledge between employees.

In addition, the themes that were identified in the question above contradicts the respondents' answers to the questions: "When you consider the culture of your department, how does your department support or encourage knowledge sharing between employees?" and "Do leaders in your organisation encourage/drive knowledge sharing?"

One example is that in those sections mentioned above, respondents mentioned that leadership encourages and supports knowledge sharing between employees but in this section, respondents mentioned that there is no knowledge sharing drive from leadership.

This section links to existing theory discussed in the literature review that states that knowledge sharing is complex, versatile and influential to effective KM and organisational trade. In addition, employees are influenced by many factors such a culture of the organisation and trust between employees when sharing knowledge.

The results reveal that some employees experience a good knowledge sharing environment and are comfortable sharing knowledge with other employees of different experience levels while other employees are not comfortable sharing knowledge. It is the responsibility of the leaders in the organisation to create an open atmosphere for employees to share knowledge and to empower and motivate employees to share knowledge.

4.2.3. Culture

4.2.3.1. Level of comfort with pitching an idea to team members, manager or organisational platform

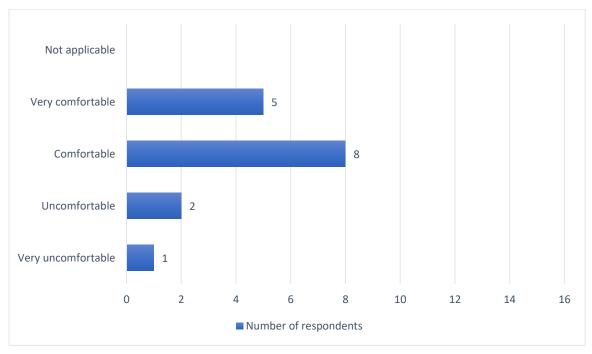


Figure 4.2-11 - Respondents' level of comfort with pitching ideas to team members, managers or organisational platforms

Figure 4.2-11 shows that 6.25% of respondents said they were very uncomfortable with sharing new ideas that challenge the status quo, 12.5% said they were uncomfortable, 50% said they were comfortable and 31.25% said they were very comfortable. No respondents chose "not applicable".

Seven interviewed respondents said that they are very comfortable with pitching ideas, three respondents said that they are neutral and three respondents said that they are not comfortable at all with pitching ideas. Of the seven respondents that said that they are comfortable, some of those respondents commented further stating:

- Respondent 1 "The process is very hierarchical, you speak to the first layer of senior then second layer".
- Respondent 4 "No culture to share, feedback for ideas are not positive".
- Respondent 13 "Open culture and ideas are welcomed and encouraged".

This section reveals some contradictions in respondents' responses. Some respondents said that they can share knowledge openly and freely while other respondents said that the

culture in the organisation does not encourage sharing ideas. This contradiction further reveals that different employees experience different cultures in different departments in the organisation.

4.2.3.2. Designated platforms to pitch ideas

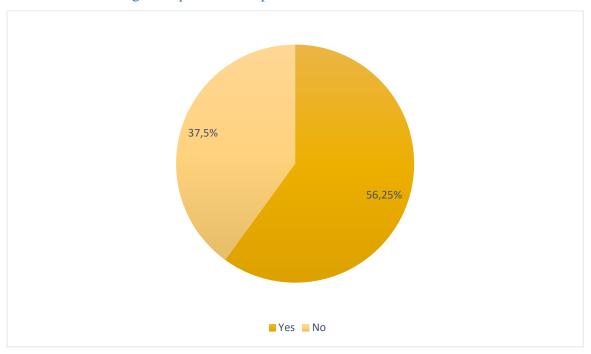
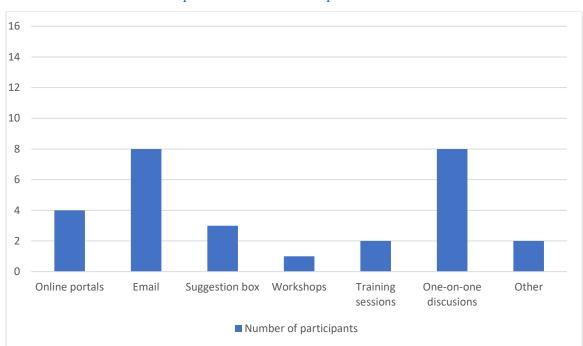


Figure 4.2-12 - Indication of designated platforms to pitch ideas

Figure 4.2-12 shows that 56.25% of respondents said that there are designated platforms to pitch ideas, 37.5% of respondents said that there are no designated platforms. One respondent said both yes and no so the response was excluded from the results.



4.2.3.2.1. Selection of platforms available to pitch ideas

Figure 4.2-13 - Platforms available to pitch ideas

This question was answered only by respondents who answered yes to Question 4.2.3.2. 50% of the respondents chose only one option for the question while the other 50% chose multiple answers for the question.

Figure 4.2-13 shows that 40% of the respondents chose online portals as the designated platform to pitch ideas, 80% of the respondents chose email, 30% chose suggestion box, 10% chose workshops, 20% chose training sessions, 80% chose one-on-one discussions and 20% chose other as the designated platform.

One respondent chose other designated platforms which is a forum for all employees under assistant vice president grade.

One can surmise that the majority of the respondents are comfortable with pitching ideas through emails and one-on-one discussions. One can deduce that the respondents that are comfortable pitching ideas through one-on-one discussions and emails have an open knowledge sharing culture in their department/team while the respondents that chose suggestion box, workshop or training sessions might not have an open knowledge sharing culture. Another perspective could be that the respondents chose the platforms based on their preference of communication.

During the interview phase, eight respondents said that there are no designated platforms to pitch ideas whilst five of the respondents said that there are some platforms.

The platforms mentioned by respondents include:

- Jabber used to collaborate.
- Pitch it an internal platform to pitch ideas.
- Hackathon event that allows employees to pitch ideas in front of other employees and seniors.
- Team meetings.

4.2.3.3. Employee reward for the implementation of their ideas

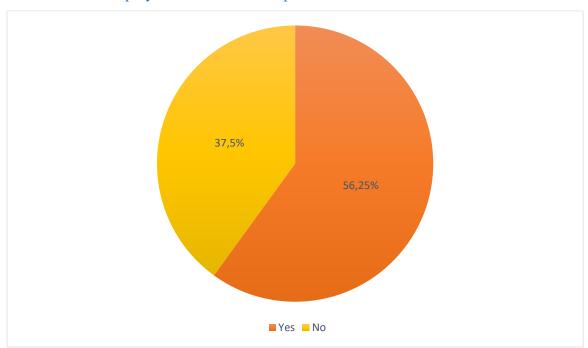
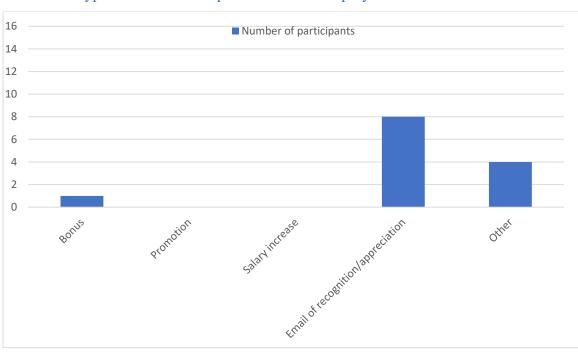


Figure 4.2-14 – Indication of reward for the implementation of employees' ideas

Figure 4.2-14 shows that 56.25% of respondents said that employees are rewarded for the implementation of their ideas, 37.5% of respondents said that employees are not rewarded. One respondent said they did not know



4.2.3.3.1. Type of reward for implementation of employees' ideas

Figure 4.2-15 - Reward for implementation of employees' ideas

Figure 4.2-15 shows that out of the 56.25% of respondents that said yes to employees rewarded for the implementation of their ideas, 11.11% said employees were awarded bonuses, 88.8% chose email of recognition or appreciation as the reward and 44.4% chose other.

The respondents that chose other rewards not listed in the options said that employees are rewarded through announcements at town hall events, rewards and incentives such as "Thank you" awards.

Eight interviewed respondents said 'no' whilst four respondents said 'yes' with one respondent said that they were not sure.

A follow-up question was asked for respondents to mention how employees are rewarded. The respondents mentioned money, recognition and a bonus as a way that some employees are rewarded.

4.2.3.4. Leaders encouragement/drive of knowledge sharing in the organisation

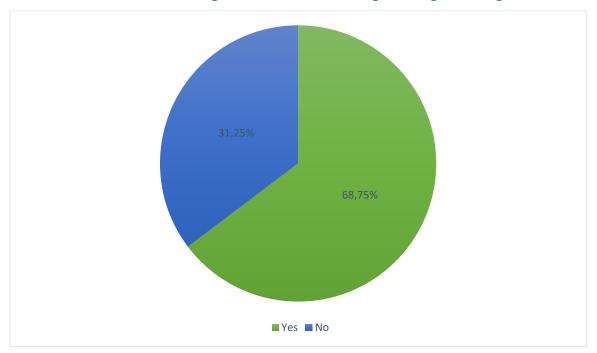
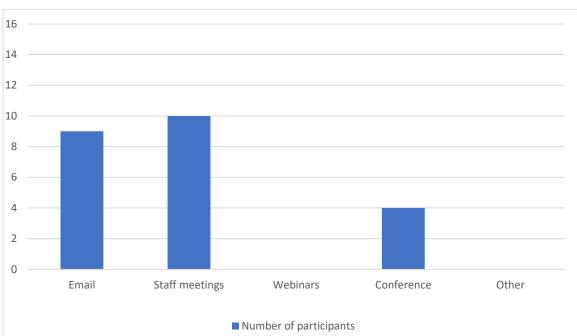


Figure 4.2-16 – Indication of leaders in the organisation encouraging/driving knowledge sharing

Figure 4.2-16 shows that 68.75% of respondents said that leaders encourage knowledge sharing in the organisation and 31.25% of respondents said that leaders in the organisation do not encourage knowledge sharing.

Ten interviewed respondents said "yes", one respondent said "no" and two respondents said that they were not sure.

A follow-up question was asked for respondents to mention how the organisation encourages/drive knowledge sharing. The respondents that said "yes" said that there are formal knowledge sharing sessions, daily and monthly meetings and there is open communication from leaders to share knowledge. Two respondents mentioned that knowledge sharing is encouraged/shared by the top management but not from the other employees.

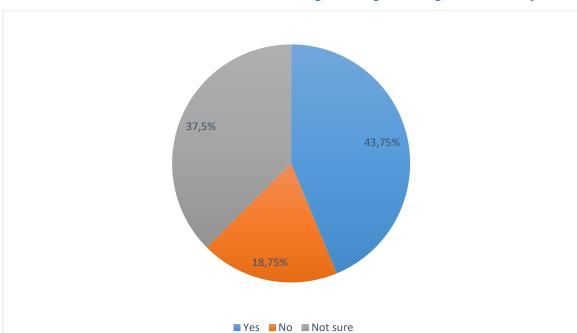


4.2.3.4.1. Platforms used to encourage/drive knowledge sharing

Figure 4.2-17 - Platforms used to encourage/drive knowledge sharing

Out of the 68.75% of respondents that said yes to Question 4.2.3.4, 81.8% of the respondents chose multiple answers to the follow-up question and 18.18% of respondents chose only one option for the question.

Figure 4.2-17 shows that 81.8% of respondents chose email as the mode of communication to employees, 90.9% said that leaders encourage employees to share knowledge during staff meetings and 36.36% said conference as the mode of communication. No respondents chose "webinars" or "other".



4.2.3.4.2. Indication of continuous knowledge sharing as an organisational objective

Figure 4.2-18 - Indication of continuous knowledge sharing as an organisational objective

Figure 4.2-18 shows that 43.75% of respondents said that knowledge sharing is an organisational objective, 18.75% of respondents said that knowledge sharing is not an organisational objective and 37.5% said they were not sure.

Seven respondents said "no" to this question while six respondents said "yes". The respondents that said "yes" mentioned that there is constant sharing of knowledge and willingness to share knowledge. One respondent mentioned that while there is an encouragement to share knowledge, knowledge sharing only occurs when an employee is leaving the organisation.

Respondent 8 said: "no formal plan but there is willingness to share knowledge and provide assistance".

4.2.3.5. Policies that govern knowledge sharing?

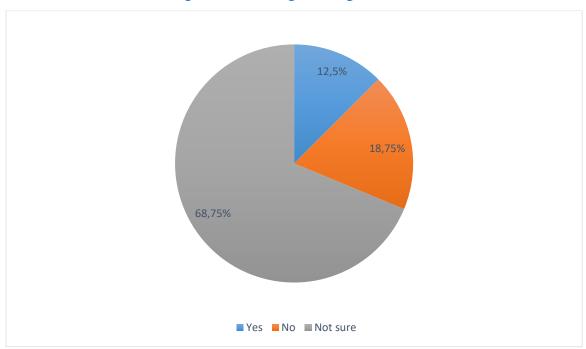


Figure 4.2-19 – Indication of policies that govern knowledge sharing

Figure 4.2-19 shows that 12.5% of respondents said there are policies that govern knowledge sharing, 18.75% of respondents said no and 68.75% of respondents said they are not sure whether there are policies or not.

Eight of the 13 interviewed respondents said that there are no policies that govern knowledge sharing in the organisation while five respondents said that they were not.

4.2.3.6. Knowledge sharing inclusion in employees' Key Performance Indicators (KPI)

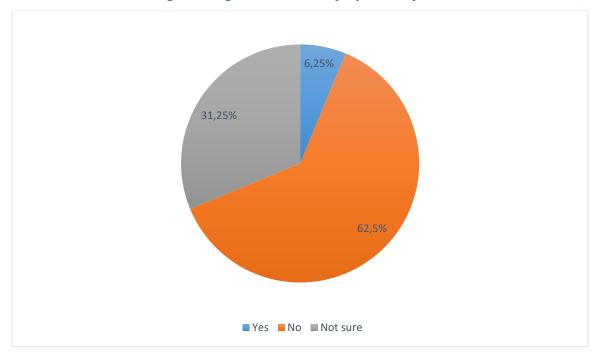


Figure 4.2-20 – Indication of knowledge sharing inclusion in employees' key performance indicators

Figure 4.2-20 shows that 6.25% of respondents said that knowledge sharing is included in their KPI, 62.5% of respondents said knowledge sharing is not included in their KPI and 31.25% of respondents said they are not sure whether knowledge sharing is included in their KPI.

Eleven interviewed respondents said that knowledge sharing is not included in their KPI while two respondents said they were not sure.

4.2.3.7. Indication of feedback request from management when knowledge sharing processes are being reviewed

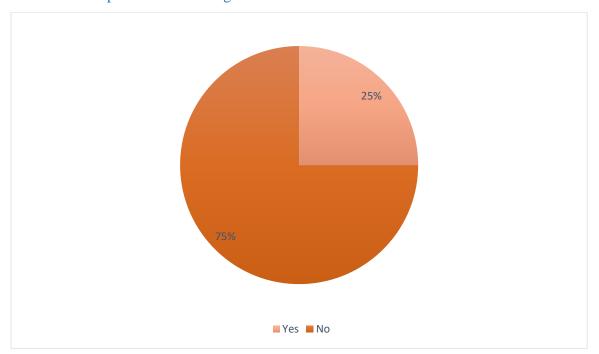


Figure 4.2-21 – Indication of feedback request from management when knowledge sharing processes are being reviewed

Figure 4.2-21 shows that 25% of respondents said that management requests feedback from employees when knowledge sharing processes are reviewed and 75% of respondents said that management does not request feedback.

4.2.3.7.1. Method of feedback obtained from employees during knowledge sharing process

Table 4.2-6 – Method of feedback from employees during knowledge sharing process review

Response	Number	Percentage
Surveys	2	50%
Workshops	0	0%
Other	2	50%
Total	4	100%

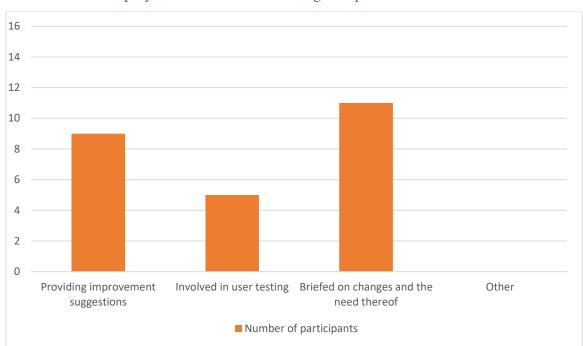
Table 4.2-6 shows that out of the 25% of respondents who said that management requests feedback from employees when knowledge sharing processes are reviewed, 50% said the feedback is requested through surveys and 50% said the feedback is requested through other modes of communication such as emails and discussions. No respondent chose "workshops".

4.2.3.8. Employees' involvement when changes to processes and new tools are implemented

Table 4.2-7 – Indication of employees' involvement with process changes and tools implementation

Response	Number	Percentage
Yes	12	75%
No	4	25%
Total	16	100%

Table 4.2-7 shows that 75% of respondents said that they are involved when new tools and changes to processes are implemented and 25% of respondents said that they were not involved.



4.2.3.8.1. Employees' involvement in changes to processes and tools

Figure 4.2-22 - Employees involvement in changes to processes and tools

Figure 4.2-22 shows that out of the 75% of respondents that said that they are involved when new tools and changes to processes are implemented, 75% of respondents said that they were involved in providing suggestions for improvement, 41.6% said that they were involved in user testing and 91.6% said that they were briefed on changes that will be made as well as on the need for the changes.

During the interview phase, ten respondents said that employees are involved when changes to processes and new tools are implemented while three respondents said that employees were not involved.

The respondents mentioned that employees receive training on processes and how to use new tools as well as how their team and way of working will be impacted.

Some respondents mentioned that some employees are included in the entire process from the need of new tools and changes to processes to the implementation thereof. Some respondents also mentioned that employees are asked to test new tools and other respondents mention that employees are only informed about the new tools and changes to processes over emails, meetings and sessions.

This section reveals the culture of knowledge sharing in the organisation as reflected in the respondents' responses. One could argue that employees would not be comfortable sharing

ideas if the organisation is not open to receiving ideas from employees, tools for sharing knowledge are not communicated openly to all employees and knowledge sharing is not accessed or measured in some way. The theory mentioned in the literature review supports this deduction because it states that employees who are in a good knowledge sharing environment will most probably be encouraged to network more with other employees and complete their tasks more effectively and efficiently.

4.2.4. Knowledge management

4.2.4.1. Respondents' knowledge of KM

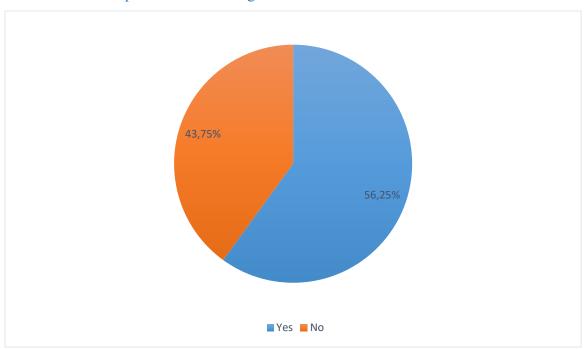


Figure 4.2-23 – Indication of respondents' knowledge of KM

Table 4.2-23 shows that 56.25% of respondents said they know what KM is and 43.7% of respondents said that they did not know.

A follow-up question was asked to find out where employees learned about KM.

Of the 56.25% respondents that said they know what KM is, 33.3% said they learned about KM from work, 44.4% said from university and 11.1% said both work and university and 11.1% did not answer this question.

Ten out of the 13 interviewed respondents said that they know what KM is. Three respondents said that they do not know what KM is.

When asked to provide an explanation of what KM is, the theme was identified was:

Management of knowledge – Nine respondents define KM as a way to collect, store
and access a set of specialised information and managing knowledge in a way that
will make it easy for people to obtain, share and transfer within teams. In addition,
KM is described as having ideas, procedures and processes in one place where
relevant people can have access and avoid repeating the same mistakes.

One respondent mentioned that KM is the tacit knowledge that flows through the organisation in order for the organisation to build competitive advantage.

When asked as to where and how they learnt about KM, five respondents said they learned about KM through general knowledge that they picked up over the years, four respondents said that they learned about KM during their years at University and one respondent said that they learned about KM at work.

4.2.4.2. Employees' knowledge of specific departments or divisions that focus on KM in your organisation

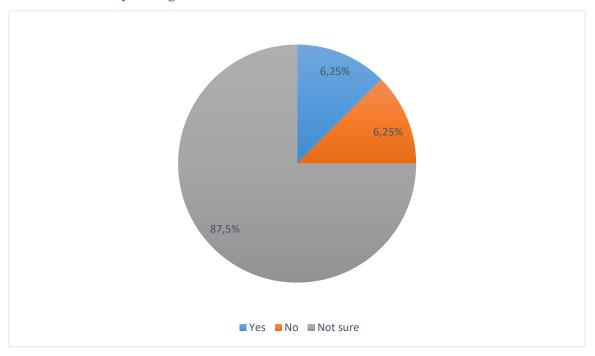


Figure 4.2-24 – Indication of a specific department or division that focuses on KM in the organisation

Figure 4.2-24 shows that 6.25% of respondents said that there is a specific department or division that focuses on KM, 6.25%% of respondents said that no specific department or division focuses on KM and 87.5% of respondents said they are not sure.

One can deduce from the above responses that, based on the fact that some respondents said there is a KM department while the majority of the respondents do not know whether

there is a KM department, the KM department is not advertised to the entire organisation and KM is thus not a priority or strategy in the organisation.

Eleven interviewed respondents said "no" to this question and two respondents said they were not sure. No follow-up questions were asked in this regard.

93,75% Per Not sure

4.2.4.3. Employees' knowledge of a specialist KM team

Figure 4.2-25 – Indication of a specialist KM team in their organisation

Figure 4.2-25 shows that 6.25% of respondents said that there is a specialist management team and 93.75 of respondents said they are not sure. Only one person said yes to this question and none of the respondents said no.

There was a follow-up question which was: If yes, how often do you make use of their services? The respondent who said that there is a specialist management team said that they contact the team on an ad hoc basis. The respondent then answered "no" to the follow-up question which was: if applicable, are the services of the KM sufficiently marketed within the organisation?

4.2.4.4. Method of researching unknown topics/subject matter when completing a task

Table 4.2-8 – Respondents' method of researching unknown topics/subject matter when completing a task

Response	Number	Percentage
Ask your colleagues	0	0%
Google	1	6.25%
Both	14	87.5%
Other	1	6.25%
Total	16	100%

Table 4.2-8 shows that 6.25% of the respondents said they research unknown topics by searching on Google, 87.5% said that they ask colleagues and check Google, 6.25% said they research topics using other means such as learning platforms like Udemy. No respondent chose only asking their colleagues when they research unknown topics.

4.2.4.5. Employees' knowledge of a library/repository where the description of business processes are stored

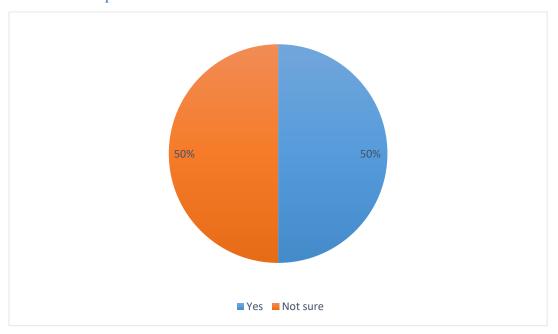


Figure 4.2-26 – Indication of a library/repository where business process documents are stored in the organisation

Figure 4.2-26 shows that 50% of the respondents said that the organisation has a library/repository where the business process documents are stored, 50% of respondents said they were not sure. No respondent said no to this question.

4.2.4.5.1. Type of library/repository in the organisation

Table 4.2-9 – Type of library/repository that the organisation has

Response	Number	Percentage
Paper-based	0	0%
Electronic	5	62.5%
Both	3	37.5%
Total	8	100%

Table 4.2-9 shows that out of the 50% of respondents that said that the organisation has a repository, 62.5% said the organisation has an online repository and 37.5% said the organisation had both electronic and paper-based repository. No respondent said that the organisation only has paper-based repository.

Eleven interviewed respondents said that the organisation has a library/repository while two respondents said no. Seven respondents said there is an electronic library/repository, two respondents said there is a paper-based library/repository and two respondents said both electronic and paper-based library/repository are available in the organisation.

The existing theory discussed in the literature review states that the KM process aids the sharing of knowledge. This description leads to the deduction that the lack of awareness of the organisational KM strategy, or lack of clarity of departments that govern effective KM will in turn affect the knowledge sharing practices between employees. In addition, the organisation needs to make the effort to improve the KM activities and strategy so that employees can have a standardised and uniform method of managing and sharing their knowledge.

4.2.5. Employee training

4.2.5.1. Frequency of classroom style learning/training sessions

Table 4.2-10 – Frequency of classroom style learning/training session

Response	Number	Percentage	
Monthly	0	0%	
Quarterly	8	50%	
Never	3	18.75%	
Other	5	31.25%	
Total	16	100%	

Table 4.2-10 shows that 50% of the respondents said they partake in classroom style learning or training every quarter, 18.75% of the respondents said they did not have any classroom style learning or training and 31.25% of the respondents said they partake in classroom style learning or training once a year, on an ad hoc basis. No respondent chose "monthly" as a frequency of classroom style learning/training.

Three out of the 13 interviewed respondents said that they partake in the classroom style learning/training sessions quite often, four respondents said that they have the sessions fairly often and five respondents said that they do not have the sessions often enough. One respondent elaborated by saying that the sessions only happen once a year. One respondent said that they do not partake in any classroom style learning/training sessions.

Twelve respondents said that they find the sessions valuable while one respondent said that the sessions are somewhat valuable.

The following themes that were identified in the respondents' answers who find the sessions valuable include:

 Acquiring new skills – Five respondents mentioned that employees gain and transfer more knowledge, get new ideas and concepts and learn practical and better ways of completing tasks.

- Ask questions Three respondents mentioned that the classroom style sessions allow employees to ask questions and get immediate feedback, the employees are able to interact and collaborate.
- Identify gaps in existing knowledge Three respondents mentioned that having
 these sessions allow employees to broaden their knowledge base and identify
 strengths and weaknesses in their way of working and thinking. In addition, the
 sessions are more valuable when it is facilitated by someone outside the
 organisation because the facilitators are able to think differently.

Additional comments from respondents are as follows:

Respondent 4 - "Good platform to ask questions in a group; other people ask something that you didn't think of".

Respondent 9 - "The session is valuable if it is based on what interests me".

4.2.5.2. Frequency of virtual learning/training sessions

Table 4.2-11 – Frequency of virtual learning/training sessions

Response	Number	Percentage	
Monthly	4	25%	
Quarterly	9	56.25%	
Never	1	6.25%	
Other	1	6.25%	
Total	15	93.75%	

Table 4.2-11 shows that 25% of the respondents said they partake in virtual learning or training every month, 56.25% of the respondents said they partake in virtual learning or training every quarter, 6.25% of the respondents said they did not have any virtual learning or training and 6.25% of the respondents said they partake in virtual learning or training when required. One person did not respond to this question.

Nine interviewed respondents said that they partake in virtual learning/training sessions quite often. Four of the respondents said that they do not have virtual sessions often.

When asked about the value obtained from these sessions, eight respondents said they found the sessions valuable and the reason was that the employees are able to choose topics and revisit the training sessions if they require additional learning. In addition, the training sessions can be done at any time convenient for the employee. Three respondents said the sessions were not valuable and two respondents said that the question was not applicable to them.

Additional comments from respondents include:

Respondent 8 - "Virtual learning summarises information that would take longer to read through but some fundamental theory is left out"

Respondent 5 - "It is a great place to search a variety of topics for relevance, interest and role"

The respondents that said the sessions were not valuable, mentioned that it is easy to get distracted because there is no opportunity to interact with other employees. One respondent suggested that the sessions should be shorter so that the employee can process the information and information overload can be reduced. Another respondent commented that there should be a recording made of a person lecturing instead of using text.

4.2.5.3. Indication of staff encouragement from department/organisation to obtain professional certifications that relate to their career path

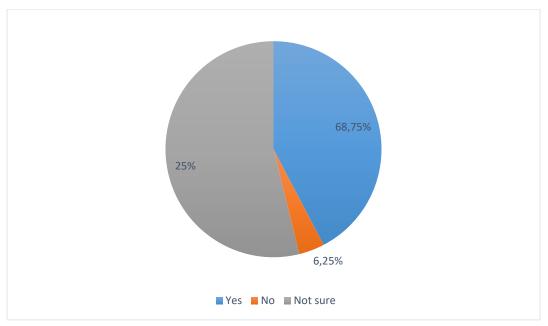


Figure 4.2-27 – Indication of encouragement to obtain professional certifications that relate to staffs' career paths

Figure 4.2-27 shows that 68.75% of respondents said that they are encouraged to obtain professional certifications, 6.25% of respondents said they are not encouraged and 25% of respondents said they are not sure.

Ten of the interviewed respondents said that their department/organisation encourages employees to obtain professional certifications that relate to their career path. Respondent 12 commented further and said: "We are encouraged but we are not enabled to obtain certifications"

Three respondents said that they were not encouraged to obtain certifications. One respondent commented further to say that it only happens in exceptional cases.

There was a follow-up question of whether employees were rewarded for obtaining professional certifications.

Of the respondents that said yes, four respondents said that employees were not rewarded for obtaining certifications while four respondents said that employees were rewarded for obtaining certifications and two respondents were not sure.

This section identifies the learning sessions that respondents take part in as well as opportunities available to employees to expand their education and knowledge. This section reveals that while some employees partake in frequent virtual and face-to-face learning/training sessions other employees do not have the same opportunity. This speaks to the culture of learning in the organisation as well as importance or value placed on employee development.

The employees addressed being up-skilled in the organisation and while some respondents feel up-skilled, some respondents feel that the organisation is not making enough effort. The employees might feel undervalued by the organisation if they are not up-skilled and according to the theory from the literature review, employee morale is affected when employees do not feel valued and this affects their motivation and overall productivity in the organisation.

4.2.6. Learning methods

4.2.6.1. Indication of link between better access to knowledge sharing networks and better performance

Table 4.2-12 – Indication of link between better access to knowledge sharing networks and role performance

Response	Number	Percentage
Yes	16	100%
No	0	0%
Total	16	100%

Table 4.2-12 shows that 100% of respondents said that they would perform better in their role if they had better access to knowledge sharing networks.

Twelve of the interviewed respondents said that there is a link because less time is wasted because you work with prior knowledge and you do not repeat the same mistakes as other employees and productivity is increased. One respondent mentioned further that employees can share their knowledge and up-skill themselves as their knowledge grows. One respondent said that there is no link between productivity and effective knowledge sharing

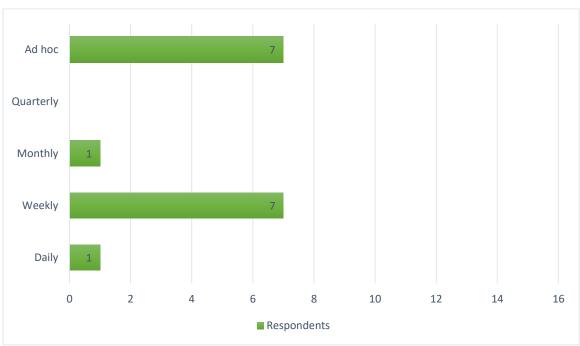
4.2.6.2. Most beneficial method of learning

Table 4.2-13 – Most beneficial method of learning to respondents

Response	Number	Percentage
Classroom/online learning sessions	5	31.25%
On the job learning	11	68.75%
Total	16	100%

Table 4.2-13 shows that 31.25% of the respondents said that they prefer classroom/online learning sessions while 68.75% prefer on the job learning.

Seven of the thirteen respondents said that they prefer both classroom/online sessions as well as on-the-job learning. Five respondents said that they prefer on-the-job learning and one respondent said they prefer classroom/online sessions.



4.2.6.3. Frequency of brainstorming sessions

Figure 4.2-28 - Frequency of brainstorming sessions

Figure 4.2-28 shows that 6.25% of the respondents said that they engage in brainstorming sessions every day, 43.75% said their brainstorming sessions happen weekly, 6.25% said their brainstorming sessions happen monthly and 43.7% said it happens on an ad hoc basis. No respondents said that they brainstorm on a quarterly basis.

Six of the interviewed respondents said that they engage in brainstorming sessions very often, two respondents said that the sessions happen fairly often, one respondent said the sessions happen on an ad hoc basis and four respondents said that brainstorming sessions do not happen at all.

This section reveals the knowledge sharing practices of the respondents. While the employees see that knowledge sharing enhances their productivity in the organisation, some of the employees do not have enough learning and training sessions to share knowledge with other employees and improve their skills and competence while other employees have frequent learning sessions. The lack of training sessions could be due to lack of capacity or the knowledge sharing culture of the organisation which does not

mandate knowledge sharing between employees. This links to the literature review where barriers of knowledge sharing are discussed. In this case leadership and time allocation is the barrier to knowledge sharing in some of the respondents' departments.

4.2.7. Knowledge retention

4.2.7.1. Indication of subject matter experts within employees' department

Table 4.2-14 – Indication of subject matter experts within respondents' departments

Response	Number	Percentage
Yes	15	93.75%
No	1	6.25%
Total	16	100%

Table 4.2-14 shows that 93.75% of respondents said that there are subject matter experts within their department and 6.25% of respondents said there are no subject matter experts within their department.

Twelve of the interviewed respondents said that there are subject matter experts in their department and one respondent said that there are no subject matter experts in their department.

Eight of these twelve respondents said that these experts are readily available to share their knowledge, three respondents explained that the experts may be willing to share but do not have the time to share their knowledge. One respondent said that the experts are not openly available to share their knowledge.

Five of the eight aforementioned respondents said that they utilise the services of experts in their department very often. Two respondents said that the interaction happens once a month or as needed respectively. Two respondents said that the interaction does not happen often enough. One respondent said that it rarely happens and another respondent said that they do not interact with the experts at all

The one respondent, that said that the experts in their department are not openly available to share knowledge, answered this question. The response was that employees do not solve

problems as quickly as they would have if they had available experts to guide other employees.

It can be seen that some of the respondents interact with subject matter experts on a regular basis while some respondents do not interact often enough. This realisation highlights the culture of isolation within the organisation which causes employees to have different knowledge sharing experiences

4.2.7.2. Knowledge of experts specifically in respondents' department or organisation *Table 4.2-15* – Indication of expert recognition in respondents' department or organisation

Response	Number	Percentage	
Yes	13 out of 16	81.25%	
No	2 out of 16	12.5%	
Total	15	93.75%	

Table 4.2-15 shows that 81.25% of respondents said that those experts are recognised in their departments/organisation as experts while 12.5% of respondents said no. There was one person who did not respond.



4.2.7.3. Communication method between employees and experts

Figure 4.2-29 - Communication method between employees and experts

Figure 4.2-29 shows that out of the 86.6% of respondents that answered yes to the question above, 76.9% of the respondents said that they communicate through email, 23% of the respondents communicate with experts over the phone and all of the respondents said they communicate with the experts face-to-face. No respondent chose "other" as a mode of communication with experts.

The next section will discuss the additional questions of the interviews that were not included in this section. The additional sections include elaborations to some of the questions as well as a section on organisational learning that was only included in the interview questions.

4.3. Analysis of findings – Interviews

4.3.1. Knowledge management

4.3.1.1. Indication of integration of employees of different generations in employees' department

Ten respondents said "yes", two respondents said "no" and one respondent said they were not sure.

4.3.1.1.1. Frequency and context different generational employees work together

Eight respondents said that they work with different generational employees on a regular basis and two respondents said that they work together with different generational employees based on assignment to projects.

4.3.1.2. Culture of knowledge sharing between the different generations

The themes that were identified in the respondent's answers include:

- Experience Five respondents mentioned that people with a higher level of experience share knowledge while other respondents said that experienced and older employees hoard knowledge. Some respondents mentioned that employees are more willing to share knowledge with educated employees over employees with fewer qualifications.
- Culture Four respondents said that employees share knowledge very openly, willingly and with mutual respect. Other respondents said that some employees share knowledge with people in their team but not with others in the organisation and some employees require a lot of chasing before they share their knowledge.

Additional comments from respondents:

- Respondent 3 "Everyone shares and has a good attitude of making the company better, not themselves"
- Respondent 4 "You can approach people in the same team"
- Respondent 6 "KS affected negatively because there is no diversity or wide range of age groups or race"
- Respondent 11 "People of specific race do not get access to information very easily"

This section identifies the culture of knowledge sharing between employees of different generations. The results reveal that while there is a culture of openness between employees of different generations, some employees are selective with employees they share knowledge with such as education level.

4.3.2. Employee training

4.3.2.1. How do you research unknown topics/subject matter when completing a task?

Ten respondents said that they research unknown topics/subject matter by searching on Google. One respondent said that they ask their colleagues and two respondents said that they usually access Google and also ask their colleagues.

This section reveals that employees openly research online when they want to complete a task while other employees first seek help from their colleagues in order to avoid reinventing the wheel. One can deduce that there is a healthy knowledge sharing environment that allows employees to trust each other enough to ask for help when in need of information.

4.3.3. Organisational learning

4.3.3.1. Interpretation of the term 'organisational learning'

The themes that were identified from the respondents' responses include:

- Seven respondents mentioned that organisational learning is learning about the organisation's structure, policies, regulatory, culture, processes and requirements in order to work more effectively.
- Three respondents said that organisational learning is the growth of knowledge that
 the organisation has from knowledge sharing of employees and the experience that
 the organisation gains from learning.

Respondent 6 described organisational learning as: "building a culture that allows teams to fail without consequences and learn quickly".

Two respondents said that organisational learning is sharing knowledge within the organisation".

4.3.3.2. Definition of 'learning in an organisation'

All of the respondents defined learning in an organisation as learning of employees to grow as an individual and be up-skilled in order to adapt to changes in the environment.

Additional comments from respondents include:

Respondent 1 - "Understanding the culture of the organisation as well as what you as an individual can add to the existing story of the organisation".

Respondent 5 - "Things change frequently so you should be learning continuously".

Respondent 7 - "Being inquisitive, going beyond what you are doing daily and learning about the systems in the organisation end-to-end".

4.3.3.3. Indication of the organisation putting in enough effort to up-skill its staff

Seven respondents said that the organisation puts in enough effort to up-skill the employees such as sponsoring studies, while two respondents said that the organisation is in the process and putting in some effort. Four respondents said that the organisation does not put in effort. One respondent commented further and said that it is not enough because employees are encouraged to up-skill themselves but they are not enabled to do so.

4.3.3.3.1. Actions to raise that awareness in the organisation

Three respondents mentioned that managers and seniors in the organisation should have constant meetings with employees to discover and discuss their goals. One respondent mentioned that it is an individual responsibility – employees should identify gaps to know where they want to be in future.

This section reveals the knowledge that respondents have about organisational learning. The definitions provided by the respondents, link to the existing theory discussed in the literature review about organisational learning which states that organisational learning is progression and growth that is gained by the organisation over time that can be referred to as an organisational experience.

4.3.4. Knowledge retention

4.3.4.1. Process of transferring knowledge to the rest of the department when an experienced member of the department resigns or retires

Seven respondents said that there is a process of transferring knowledge to the rest of the department. The process includes a handover process which starts once the employee leaving the organisation serves his/her notice, then there are a few sessions of knowledge sharing between the employees and documents are uploaded to the SharePoint site. Two of the respondents said that there is an ongoing process of knowledge sharing and there are a few employees that have the same knowledge so there is no gap when employees leave.

Three respondents said that there is currently no process of transferring knowledge to the rest of the department and three respondents said that they are not sure if there is a process.

4.3.4.1.1. Ways to improve process of knowledge retention

All of the respondents said that knowledge sharing should occur regularly between employees, some respondents mentioned further that there should be a central database where knowledge can be transferred between employees and other employees mentioned that the on-boarding process of new employees should happen quicker to ensure that the handover process happens more effectively.

This section reveals the interaction between less knowledgeable employees and experts in the organisation. There is a divide in knowledge sharing in that some departments are able to interact and learn from experts available in the team/department while other employees do not have the same experience. One can deduce that the departments that do not encourage knowledge sharing between experts will not have the benefits of expert knowledge as stated in the literature review and the knowledge of experts will be lost if the knowledgeable employee leaves the organisation.

4.4. Summary of findings

Based on the overall summary of the findings, the general theme that was identified is that the culture of the organisation makes it difficult for employees to share knowledge due to lack of capacity to share, inadequate sessions that provide interaction and collaboration among employees as well as lack of encouragement or drive from the leaders in the organisation for employees to share knowledge. In addition, some employees work in isolation and are not willing to share knowledge with other employees to protect their job security or stay relevant in the organisation.

The tools that are used for sharing knowledge are known to employees but there is no standardised tool that the organisation has agreed to use. The tools that are used for storing knowledge are not updated or managed which makes it difficult for employees to know what is relevant.

Most of the employees do not know what KM is and they do not know if there is a specific KM department in the organisation. In addition, KM is not an overall strategy in the organisation.

The analysis also revealed that employees do not have enough training sessions for all departments which causes knowledge gaps across a few departments. In addition, the knowledge transfer process in the organisation is not known to all employees and the

handover process from employees leaving the organisation is not effective enough for all the relevant knowledge to be transferred.

The challenge that was revealed in this finding is that there are contradictions from different respondents regarding opportunities for knowledge sharing, support from leadership to share knowledge as well as the availability of and interaction with subject matter experts in the departments. Some respondents mentioned that there is an open culture of knowledge sharing and encouragement from leadership while other respondents mentioned that the value of knowledge sharing is not recognised by leadership and there is no capacity to share knowledge. Some respondents mentioned that experts are openly available to share knowledge with other employees and other respondents do not have experts in their departments or the experts in their department are not openly available to share knowledge.

These contradictions reveal two different knowledge sharing cultures that exist in the organisation. One culture encourages employees to share knowledge openly and freely while the other culture hinders employees from sharing knowledge.

4.5. Conclusion

In this chapter, the data collected was analysed, findings and a summary of the analysis was also provided. The responses to the questionnaires were tabulated and presented on pie and bar graphs and the calculation of responses were presented in number and percentage form. The interviews were discussed and some of the responses were presented according to different themes. In the next chapter, the summary of the findings will be mapped to the objectives of this study and the research questions, recommendations based on the findings, recommendations for further research as well as the conclusion will be discussed.

Chapter 5 – Summary

5.1. Introduction

The concept of knowledge sharing and management might seem straightforward, however knowledge sharing between employees of different experience levels in an organisation might be far more complex when factors such as culture are considered. This realisation was corroborated by the findings of the study which revealed that respondents do not know of the organisation's KM strategy. Furthermore, there is a culture of isolation in the organisation that creates silos of knowledge sharing between employees.

This chapter includes the discussion of the findings that were identified from the analysis of the collected data as well as the summary of the research study. The objectives of the research are discussed to determine whether they were met or not. The main findings are discussed in relation to the research question and sub-questions. The limitations of this research are also reiterated in this chapter as well as recommendations for the company being studied and recommendations for further research. The chapter is wrapped up with a final conclusion of the study.

5.2. Summary of the research

The focus of this research study was to establish a way that knowledge can be shared between subject matter experts and new joiners or novices in a financial services organisation. This includes finding out whether there are existing effective knowledge sharing methods as well as determining if employees experience barriers to knowledge sharing in the organisation. The knowledge of effective knowledge sharing would in turn help organisations find the best knowledge sharing approach that will help them get a competitive advantage in the industry.

The objectives of this research were:

- To understand the KM structure of Company X.
- To understand existing methods of knowledge sharing between employees.
- To understand why employees might be hoarding their knowledge.

• To understand the mechanisms that can be used to share knowledge more effectively.

The literature review was done in the second chapter to discuss the concepts of KM, knowledge sharing, knowledge hoarding, organisational learning and organisational culture. Experts, novices and different generational motivations were also discussed as well as knowledge sharing methods and techniques for effective communication and learning in the organisation.

The research approach for this study was qualitative, with questionnaires and interviews as data collection methods. The analysis included the use of qualitative and quantitative analysis. Quantitative analysis in the form of percentage and frequency distribution was used to analyse the data while tables and figures were used to present the results. Qualitative analysis included the identification of themes to group the responses from participants.

5.3. Summary of findings

The participants in this study were employees in one financial services organisation that were employed permanently and temporarily, i.e. interns and contractors from 6 months to over 10 years. The sampling method used to select participants was stratified purposive sampling and there was a total of 29 participants. Questionnaires were distributed to 16 participants and interviews were conducted with 13 participants. The findings showed that most of the participants that completed the questionnaires and interviews were permanently employed in organisation.

The next section discusses whether the objectives were met based on the analysis of the collected data.

5.4. Objective 1 – To understand the KM structure of Company X

Respondents were asked what KM means to them and the majority of respondents defined KM as the process of accessing, sharing and storing knowledge in a way that makes it easier for relevant people to access, use and store the knowledge.

Some of the respondents learned about KM from the university while some learned about it from work and from general knowledge and experience over the years.

The results from this research revealed that the majority of the employees do not know if there is a KM division or strategy for the company. The employees that know about the KM division in the organisation do not know exactly what KM is or what the organisation offers regarding KM. This, in turn, means that KM is not encouraged or driven in the organisation.

When employees were asked about their knowledge sharing tools and methods, the majority of the employees mentioned that while they used tools to share knowledge, there is no one responsible for managing the knowledge. The findings from this research reveal that the structure of KM in Company X is not known.

The unknown structure of KM in the organisation also speaks to the culture of the organisation. The culture of the organisation is one of secrecy from the leaders in the organisation, either intentional or unintentional which creates uncertainty among employees.

The empirical findings in this section support theory findings which state that the structure of the organisation affects the learning of employees. The lack of recognised KM structure identified in the findings reveal that the learning and growth of employees can be affected which also affects the knowledge sharing in the organisation.

5.5. Objective 2 – To understand existing methods and tools of knowledge sharing between employees

The results from the data collection revealed that employees stored and shared knowledge with other people in the department or organisation through Microsoft SharePoint, Network drives, Cloud storage, JIRA, Confluence, Bitbucket and AWS.

Respondents also commented that while there are tools available and used to store knowledge between employees, the knowledge is not stored according to relevance or in a way that makes it easy for retrieval. Employees would store documents but there is no one responsible for making sure that the content is correct or updated. One can deduce that employees do not find value in using current knowledge repositories or tools as an effective way of sharing knowledge because the repositories or tools are not managed.

Respondents mentioned that when they need to research a new topic, they check on Google and other respondents said that they also ask their colleagues for help. Respondents

mentioned that they have an electronic library or repository where business processes are stored. Some of the respondents said that there are both paper and electronic libraries or repositories.

Some of the respondents mentioned that they mentor newly employees when they join the department and they also show the employees the best practices when completing tasks. One respondent mentioned that lack of time is a challenge to mentoring new employees and other respondents mentioned that mentoring new employees is not driven in their department. From the results, it was identified that the mentorship happens mostly in an informal setting and other respondents mentioned that the mentorship happens formally.

The research revealed that the majority of the respondents have brainstorming sessions very often while some of the respondents only brainstorm sometimes, on an ad hoc basis and others do not have brainstorming sessions at all.

One can deduce from the findings of the research that while there are a few knowledge sharing methods and tools established by some employees, there is no uniformity or consolidation of tools or methods and knowledge sharing occurs in isolation and silos of different departments or teams in the organisation.

The deductions link to the theory about organisational structures. The structure of the organisation studied is similar to the functional organisational structure and divisional and market organisational structure which highlight the silos that exist between different departments in the organisation. The silos affect effective knowledge sharing between employees.

5.6. Objective 3 – To understand the causes of knowledge hoarding between employees

The findings of the research revealed that one of the biggest challenges of sharing knowledge with other employees is lack of capacity. The respondents mentioned in section 4.2.2.3.1. about challenges that hinder knowledge sharing that they do not have enough time to mentor employees, brainstorm or share knowledge with other employees.

When asked in section 4.3.1.2. about the culture of knowledge sharing between different generation, some respondents mentioned that younger generations hoard knowledge while

some respondents said that the older generation and experts hoard knowledge because of their perceived need for job security. Some respondents mentioned that some employees only assist other employees based on those employees' level of education and experience. On the other hand, there are employees who mentioned that all employees with different levels of experience in their department are all willing to share knowledge.

One can deduce from the findings that the sharing or hoarding of knowledge in the organisation is based on the culture of the team or department. In addition, there is no recognised and uniform culture in the organisation with regard to knowledge sharing. One can extrapolate further that the biggest cause of knowledge hoarding is the organisation's culture of isolation among employees in different teams and departments and the culture of secrecy between leaders and employees. The discussion in this section is supported by the theory in the literature review that states that knowledge hoarding might occur due to employees' need to secure their position, due to lack of trust between employees and the culture of isolation in organisations.

5.7. Objective 4 – To understand the mechanisms that can be used to share knowledge more effectively

The results of the study revealed that knowledge is shared through brainstorming sessions between employees, through learning/training sessions on various platforms and through formal or informal mentoring sessions. The knowledge sharing tools that employees used are repositories, portals and applications that are not managed.

The results of the study also revealed the divide between employees that have a good knowledge sharing culture where the process of sharing and retrieving knowledge is clear to everyone in the department and employees who are not sure about the knowledge sharing process and are not enabled or encouraged to share knowledge more effectively.

One can deduce from the results that there are different cultures that exist in different departments and teams. The different cultures include the use of different knowledge sharing tools in different departments. The employees in teams or departments that have adopted the knowledge sharing culture, openly share their knowledge and the other employees in teams or departments that have not adopted the knowledge sharing culture do not feel enabled to share knowledge. In addition, the employees also require encouragement from their leaders to share knowledge and learn from experts in the organisation.

The deduction links to the theory discussed in the literature review which states that ineffective KM affects knowledge creation, storage, retrieval, transfer and application. In addition, a good knowledge sharing culture will encourage employees to share knowledge and also stay in the organisation. This results reveal that the organisation does not have a good knowledge sharing culture.

5.8. Research question and sub-questions

This section aims to answer the research question and sub-questions that were posed at the beginning of this study.

5.8.1. Sub-question 1: How does the existing organisational culture of Company X foster a healthy environment for learning?

According to the research findings, the existing culture of Company X is not clear to all employees thus creating isolated cultures within the organisation. In some parts of the organisation, there is a healthy environment for learning but in other departments, there is a lot of uncertainty. The uncertainty, in turn, creates an environment where different employees and teams make and abide by their own rules and standards which might not be a true reflection of the organisational culture and strategy.

5.8.2. Sub-question 2: In what way does the existing culture of Company X hinder or encourage effective knowledge sharing?

According to the research findings, the existing culture of Company X hinders effective knowledge sharing because of the following factors:

- There is a lack of awareness of the knowledge sharing culture and KM culture or strategy of the organisation.
- There are known platforms for knowledge sharing between employees in the organisation but the platforms have not been mandated.
- There are no dedicated tools identified for knowledge sharing between employees.
- In addition, employees do not have enough capacity to complete their daily tasks and still share knowledge with other employees.

In order to foster an environment that encourages knowledge sharing, the aforementioned factors will have to be addressed.

5.8.3. Sub-question 3: What is the most effective or preferred knowledge sharing method and tool that will improve employee growth, innovation and knowledge sharing between employees of different level of expertise?

According to the research findings, due to the isolated knowledge sharing culture of the organisation, there will be different methods and tools that will be preferred by individual employees as well as specific teams and departments. The aforementioned poses a challenge in proving whether the methods or tools will improve employee growth, innovation and knowledge sharing between employees of different level of expertise.

5.9. Recommendations for company X

The recommendations for company X based on the current findings are mentioned below:

- Incentives for sharing ideas should be implemented organisation-wide. The incentives can either be monetary or any form of organisation-wide recognition.
- Knowledge sharing and KM strategies should be developed and implemented organisation-wide. The knowledge sharing and KM culture of the organisation should be made known to all employees in the organisation.
- KM and knowledge sharing should be added to employees' key performance indicators (KPI).
- Knowledge sharing platforms should be formally encouraged organisation-wide.
 Training should be provided for the use of knowledge sharing platforms available in the organisation. Training materials should be readily available and accessible to employees, if applicable.

5.10. Recommendations for further study

The recommendations for further study are mentioned below:

• Further research can be conducted in other institutions (not limited to a financial services organisation) in South Africa.

- Two or more companies can be studied for comparison and for a bigger diversity of participants.
- Interviews or focus group interviews can be used as the mode of data collection
 instead of questionnaires so that participants can provide more details when
 answering questions posed in the interviews. This topic requires a deeper level
 of detail from participants and understanding from the researcher in order to
 analyse and interpret the data in the best way possible.
- The sample size of the participants can be much larger in order to have a fair representation of the population in the organisation/s.
- The study can include a test of current knowledge sharing tools that the participants use in order to find the most effective and useful tools.

5.11. Limitations

The limitations pertaining to this study are described below:

- Stratified purposive sampling was used to select participants for data collection
 in this study. This sampling method limited the range of participants that were
 involved in the questionnaires and interviews because the participants were all
 in one organisation and the choice of participants was not random.
- The sample size of the participants was small and puts a limit on the ability to represent the views and perceptions of the entire organisation.
- The interpretation and analysis of the questionnaires and interviews were based on the perception and understanding of the researcher which is subject to bias.

5.12. Summary

This study aimed to find the effectiveness of knowledge sharing between employees in a financial services organisation through the use of various tools and methods and the effectiveness of knowledge transfer between experts and other employees in the organisation. The aforementioned was achieved through the analysis of the data collected during the interviews and questionnaires.

In finding the effectiveness of the knowledge sharing methods and tools, challenges such as lack of capacity of employees and lack of management and uniformity of culture, tools and methods were revealed. These challenges pose a threat to effective knowledge sharing in the organisation. The results of this study reveal that the culture of the organisation affects how the employees interact with each other as well as how employees share and manage knowledge.

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Appendix A: Informed consent form

1. Project information

1.1. Title of research project:

Factors that influence effective knowledge sharing between experts and novices in a South African financial services organisation

1.2. Researcher details:

Name: Omojadesola Adegboye

Department of Information Science

Contact details: 0745186421 OR 0769852295

Email address: jade.adegboye@yahoo.com

1.3. Research study description.

I am currently studying towards my Master in Information Science degree at the University of Pretoria. The purpose of my research is to determine the way in which knowledge can be extracted from subject matter experts in an organisation and preserved for new joiners and employees that are learning in the organisation.

This interview/questionnaire will enable me to understand how knowledge is transferred between experts and novices as well as the culture and tools of knowledge sharing within your organisation. The interview session will be face-to-face, for the duration of less than an hour. There will be no compensation for your participation. Your participation is voluntary and you can withdraw at any time without penalty. All collected data will be kept confidential and your anonymity will be ensured. If you have any concerns or need clarity, please contact me at the details provided above.

2. Informed consent

2.1. I,	hereby voluntarily grant my	permission for
participation in the project as explained to	me by Omojadesola Adegbo	<u>ye</u> .

2.2. The nature, objective, possible safety and health implications have been explained to me and I understand them.

information furnished will be handled confidentially. I am aware that the results of the	
investigation may be used for the purposes of publication.	
2.4. Upon signature of this form, the participant wil	l be provided with a copy.
Signed:	Date:
Witness:	Date:
Researcher:	Date:

2.3. I understand my right to choose whether to participate in the project and that the

Appendix B: Questionnaire

Please read each question carefully and mark your answers clearly with an X or a circle. Select one option per question where applicable. Questions that might require one or more answers are indicated at each question. Provide a response for all questions unless stated otherwise, i.e. if not, move to another question.

1. Demographic questions
1.1.Are you a permanent or temporary employee?
Permanent Temporary
1.2. How many years have you been employed overall?
\bigcirc 0 – 5 months
6 months – 2 years
3-5 years
\bigcirc 6 – 10 years
10+ years
1.3. How many years have you been employed at this organisation?
\bigcirc 0 – 5 months
6 months – 2 years
3-5 years
\bigcirc 6 – 10 years
10+ years
2. Knowledge sharing
2.1. On a scale of 1 to 5, please rate the importance of knowledge sharing within your
organisation. 1 is not important and 5 is very important?
1 2 3 4 5
2.2. Which collaborative tools does your department make use of? Mark all that apply.
Microsoft SharePoint
Network drive
Cloud storage
Other
If other, please mention which tool

2.3. Are there any challenges that hinder knowledge sharing in your department?
Yes
☐ No
2.3.1. If yes, please select the appropriate response/s below. (If not, move to question 2.4)
Lack of collaborative tools
Knowledge hoarding culture
Lack of collaboration among employees
Other
If other, briefly describe your response
2.4. Are new employees in your division assigned mentors/coaches that assist them with
integrating in the department?
Yes
☐ No
Not sure
2.5. When new hires join your department, do you avail yourself to the person to mentor them?
Yes
☐ No
Not within my role
If not, what hinders you from doing this?
2.6. When new hires join your department, do you introduce them to the common/best practices
within the department when completing tasks?
Yes
☐ No
Not within my role
If not, what hinders you from doing this?
2.7. How comfortable are you with sharing new ideas that challenge the status quo?
Very uncomfortable
Uncomfortable
Comfortable
Very comfortable
Not applicable

apply. Academic databases
Academic databases
Search engines
Websites
Other
If other, list the research resources used.
2.9. How comfortable are you with approaching your peers when in need of
information/knowledge?
Very uncomfortable
Uncomfortable
Comfortable
Very comfortable
Not applicable
2.10. How comfortable are you with approaching your seniors when in need of
information/knowledge?
Very uncomfortable
Uncomfortable
Comfortable
Very comfortable
Not applicable
2.11. How often do different generational employees work together?
Regularly, employees are fully integrated
Occasionally, when there is a need
Never
Other
If other, briefly describe
, , , ,

2.12. Are there any gaps that you feel exist within your team's knowledge sharing activities?
Yes
No
2.12.1. If yes, briefly describe the gaps that you have identified (If not, move to question 3)
3. Culture
3.1. How comfortable are you with pitching an idea to your team members, manager or you
organisational platform?
Very uncomfortable
Uncomfortable
Comfortable
Very comfortable
Not applicable
3.2. Are there designated platforms to pitch ideas?
Yes
No
3.2.1. If yes, select the appropriate response/s below. (If not, move to question 3.3)
Online portals
Email Creation has
Suggestion box
Workshop
Training sessions
One-on-one discussions
Other —
3.3. Are employees rewarded for the implementation of their ideas?
Yes
No
3.3.1. If yes, how are they rewarded? (If not, move to question 3.4)
Bonus
Promotion

3.8.1. If yes, how is feedback obtained? (If not, move to question 3.9)
Surveys
Workshops
Other —
3.9. Are employees involved when changes to processes and new tools are implemented?
Yes
No
3.9.1. If yes, in what way are employees involved? (If not, move to question 4)
Provide improvement suggestions
Involved in user testing
Briefed on changes and the need thereof
Other
4 17 . 1.1
4. Knowledge management
4.1. Do you know what knowledge management is?
Yes No
4.1.1. If yes, where did you learn about it?
4.2.Is there a specific department or division that focuses on knowledge management in your
organisation?
Yes No Not sure
4.3.Is there is a specialist knowledge management team?
Yes No Not sure
4.3.1. If yes, how often do you make use of their services? (If not, move to question 4.4)
Daily Weekly Monthly Quarterly Ad hoc
4.3.1.1.If applicable, are the services of the knowledge management team sufficiently marketed
within the organisation?
Yes No Not sure

4.4. How do you research unknown topics/subject matter when completing a task? Please select
one of the following options. Do you:
Ask your colleagues
Google or use online databases
Both
Other
If other, briefly describe
4.5. Does your organisation have a library/repository where the descriptions of business
processes are stored?
Yes
No
Not sure
4.5.1. If yes, what type of library/repository is it? (If not, move to question 5)
Paper-based
Electronic
Both
5. Employee training
5.1. How often do you partake in classroom style learning/training sessions i.e. technical
training?
Monthly
Quarterly
Never
Other
If other, briefly describe

5.2. How often do you partake in virtual learning/training sessions i.e. e-learning?	
Monthly	
Quarterly	
Never	
Other	
If other, briefly describe	
5.3. Does your department/organisation encourage staff to obtain professional certification	ons
that relate to their career path?	
Yes	
☐ No	
Not sure	
6. Learning methods	
6.1. Do you feel that you would perform better in your role if you had better access	to
knowledge sharing networks?	
Yes No	
6.2. Which method of learning is more beneficial to you, classroom/online learning sessions	s or
on-the-job learning?	
Classroom/online learning sessions	
On-the-job learning	
6.3. How often do you engage in brainstorming sessions with your peers?	
Daily Weekly Monthly Quarterly Ad hoc	
7. Knowledge retention	
7.1. Are there subject matter experts within your department?	
Yes No	
a. If yes, are they recognised in your department or organisation as experts?	
Yes No	

7.2. How can y	ou communicate with these experts?
	Email
	Telephone
	Face-to-face
	Other
	If other, briefly describe

Appendix C: Interview questions

1. Demographic questions
1.1.Are you a permanent or temporary employee?
1.2. How many years have you been employed overall?
\bigcirc 0 – 5 months
6 months – 2 years
3-5 years
\bigcirc 6 – 10 years
10+ years
1.3. How many years have you been employed at the organisation:
\bigcirc 0 – 5 months
6 months – 2 years
3-5 years
\bigcirc 6 – 10 years
10+ years
2. Knowledge sharing
2.1. When you think of the concept of knowledge sharing, how important do you think it is
within your organisation?
2.2. When you consider the culture of your department, how does your department support or
encourage knowledge sharing between employees?
2.3. Does your department make use of collaborative tools such as Microsoft SharePoint,
network drives, chatrooms and cloud storage to share ideas among employees?
2.3.1. If you do not use any of the tools stated above, which tools are used in your department?
2.3.2. How do you use the tools in your department?
2.4. Are there any challenges that hinder knowledge sharing in your department?
2.4.1. If so, briefly describe these challenges
2.5. When new hires join your department, do you avail yourself to the person to mentor them

2.5.1. If not, what hinders you from doing this?

when completing tasks?

- 2.6. When new hires join your department, do you introduce them to the common/best practices within the department when completing tasks?
- 2.6.1. If not, what hinders you from doing this?
- 2.7. Are new employees in your department formally or informally assigned mentors/coaches?

- 2.7.1. If not, how do you think that affects the on-boarding process of new employees?
- 2.8. Are you comfortable with sharing new ideas that challenge the status quo?
- 2.8.1. If not, what makes you uncomfortable?
- 2.9. Are you comfortable with approaching your peers when in need of information/knowledge?
- 2.9.1. If not, what makes you uncomfortable?
- 2.10. Are you comfortable with approaching your seniors when in need of information/knowledge?
- 2.10.1. If not, what makes you uncomfortable?
- 2.11. Are there any gaps that you feel exist within the knowledge sharing activities within your team?
- 2.11.1. If yes, briefly describe the gaps that you have identified

3. Culture

- 3.1. How comfortable are you with pitching an idea to your team members, manager or organisational platform?
- 3.2. Are there designated platforms to pitch ideas?
- 3.2.1. If yes, briefly discuss the platforms that are available to employees
- 3.3. Are employees rewarded for the implementation of their ideas?
- 3.3.1. If yes, how are they rewarded?
- 3.4. Do leaders in your organisation encourage/drive knowledge sharing?
- 3.4.1. If yes, how do they drive knowledge sharing?
- 3.5. Is continuous knowledge sharing an organisational objective?
- 3.5.1. How does your team/department hope to achieve the objective stated above?
- 3.6. Are there policies that govern knowledge sharing, i.e. a knowledge sharing policy?
- 3.6.1. If yes, are the policies easily accessible to all employees?
- 3.7. Is knowledge sharing included in your KPI?
- 3.7.1. If yes, what are the assessment criteria for sharing knowledge?
- 3.8. Does management request feedback from employees when knowledge sharing processes are being reviewed?
- 3.8.1. If yes, how is feedback obtained?
- 3.9. Are employees involved when changes to processes and new tools are implemented?
- 3.9.1. If yes, in what way are employees involved?

8. Knowledge management

- 3.10. Do you know what knowledge management is?
- 3.10.1. If yes, what does it mean to you?
- 3.10.2. Where did you learn about it?
- 3.11. Is there a specific department or division that focuses on knowledge management in your organisation?
- 3.11.1. If yes, how often do you make use of their services?
- 3.11.2. Are the services of the knowledge management team sufficiently marketed within the organisation?
- 3.11.3. If yes, how are they marketed?
- 3.12. Is there an integration of employees of different generations in your department?
- 3.12.1. If yes, how often and in what context do different generational employees work together?
- 3.13. In your opinion, what is the culture of knowledge sharing between the different generations?
- 3.14. Does your organisation have a library/repository where the descriptions of business processes are stored?
- 3.14.1. If yes, what type of library/repository is it? i.e. paper-based or electronic

9. Employee training

- 3.15. How do you research unknown topics/subject matter when completing a task?
- 3.16. How often do you partake in classroom style learning/training sessions, i.e. technical training?
- 3.16.1. Do you find these sessions valuable?
- 3.16.1.1. If yes, briefly describe what makes the session valuable
- 3.16.1.2. If not, how do you think these sessions can be improved?
- 3.17. How often do you partake in virtual learning/training sessions i.e. e-learning?
- 3.17.1. Do you find these sessions valuable?
- 3.17.1.1. If yes, briefly describe what makes the session valuable
- 3.17.1.2. If not, what do you think can improve these sessions?
- 3.18. Does your department/organisation encourage staff to obtain professional certifications that relate to their career path?
- 3.18.1. If yes, are you rewarded for obtaining the certifications?

10. Organisational learning

- 3.19. What is your interpretation of the term 'organisational learning'?
- 3.20. What is your definition of 'learning in an organisation'?
- 3.21. Do you feel that your organisation puts in enough effort to up-skill its staff?
- 3.21.1. If not, what do you think can be done to raise that awareness in the organisation?

11. Learning methods

- 3.22. Do you think there is a link between productivity and effective knowledge sharing?
- 3.22.1. If yes, please elaborate briefly.
- 3.23. Which method of learning is more beneficial to you, classroom/online learning sessions or on-the-job learning?
- 3.24. How often do you engage in brainstorming sessions with your peers?

12. Knowledge retention

- 3.25. Are there subject matter experts within your department?
- 3.25.1. If yes, are these experts openly available to share their knowledge?
- 3.25.1.1. If yes, how often do you utilise their services?
- 3.25.2. If not, how does that affect the problem-solving practices in your department?
- 3.26. When an experienced member of the department resigns or retires, what is the process of transferring knowledge to the rest of the department?
- 3.26.1. How do you think this process can be improved?